

SWISS ARMED FORCES REFORM: DOCTRINAL AND ORGANIZATIONAL CHALLENGES

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
General Studies

by

HANS-JAKOB REICHEN, LIEUTENANT-COLONEL (GS)
GENERAL STAFF CORPS, SWITZERLAND
Diploma, Federal Institute of Technology, Zurich, Switzerland, 1999

Fort Leavenworth, Kansas
2016

Approved for public release; distribution is unlimited. United States Fair Use determination or copyright permission has been obtained for the use of pictures, maps, graphics, and any other works incorporated into the manuscript. This author may be protected by more restrictions in their home countries, in which case further publication or sale of copyrighted images is not permissible.

REPORT DOCUMENTATION PAGE				<i>Form Approved</i> <i>OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 10-06-2016		2. REPORT TYPE Master's Thesis		3. DATES COVERED (From - To) AUG 2015 – JUN 2016	
4. TITLE AND SUBTITLE Swiss Armed Forces Reform: Doctrinal and Organizational Challenges				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Hans-Jakob Reichen, LTC (GS)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Command and General Staff College ATTN: ATZL-SWD-GD Fort Leavenworth, KS 66027-2301				8. PERFORMING ORG REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for Public Release; Distribution is Unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT Since the end of the Cold War, the Swiss Armed Forces have gone through two major reforms and are preparing for the third. However, political and popular support for the Armed Forces has decreased, and major exercises demonstrated important shortfalls. The purpose of this study is to evaluate the state of Switzerland's military doctrine and organizations after more than 20 years of reform, understand the causes of any deficiencies, and propose recommendations to amend the situation. Using the DOTMLPF-P framework and a capabilities based assessment, the research identifies gaps between extrapolated strategic tasks and the planned Swiss Armed Forces reform. The research then explores constraints in Swiss strategic documents. Finally, the research proposes to merge doctrine and training, create an overarching Armed Forces doctrine, enhance training at the operational level, adapt headquarter manning and roles, integrate international and single-service soldiers in the main body of the operational force and clearly separate force development and security policy.					
15. SUBJECT TERMS Swiss Armed Forces, reform, doctrine, military innovation, organization, security policy, DOTMLPF-P, WEA					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT (U)	18. NUMBER OF PAGES 143	19a. NAME OF RESPONSIBLE PERSON
a. REPORT (U)	b. ABSTRACT (U)	c. THIS PAGE (U)			19b. PHONE NUMBER (include area code)

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. Z39.18

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Lieutenant Colonel (GS) Hans-Jakob Reichen

Thesis Title: Swiss Armed Forces Reform: Doctrinal and Organizational Challenges

Approved by:

_____, Thesis Committee Chair
Timothy H. Civils Jr., Ed.D.

_____, Member
Stephen D. Coats, Ph.D.

_____, Member
Kurt P. VanderSteen, M.M.A.S.

Accepted this 10th day of June 2016 by:

_____, Director, Graduate Degree Programs
Robert F. Baumann, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

SWISS ARMED FORCES REFORM: DOCTRINAL AND ORGANIZATIONAL CHALLENGES, by LTC (GS) Hans-Jakob Reichen, 143 pages.

Since the end of the Cold War, the Swiss Armed Forces have gone through two major reforms and are preparing for the third. However, political and popular support for the Armed Forces has decreased, and major exercises demonstrated important shortfalls. The purpose of this study is to evaluate the state of Switzerland's military doctrine and organizations after more than 20 years of reform, understand the causes of any deficiencies, and propose recommendations to amend the situation. Using the DOTMLPF-P framework and a capabilities based assessment, the research identifies gaps between extrapolated strategic tasks and the planned Swiss Armed Forces reform. The research then explores constraints in Swiss strategic documents. Finally, the research proposes to merge doctrine and training, create an overarching Armed Forces doctrine, enhance training at the operational level, adapt headquarter manning and roles, integrate international and single-service soldiers in the main body of the operational force and clearly separate force development and security policy.

ACKNOWLEDGMENTS

My thesis committee has been a tremendous source of support and I am extremely grateful for this unique learning experience. To Dr. Timothy H. Civils Jr, my committee chair, whose straightforward council and relentless attention to detail were desperately needed: Thank you for your leadership and unwavering commitment. To my committee members, Dr. Stephen D. Coats and Kurt P. VanderSteen: Thank you for your wisdom, expert guidance and encouragement.

I thank Mrs. Venita Krueger for her flexibility and generous support. I thank Major Christopher Nolan, Canadian Officer, for his last minute and precise proof-reading and his friendship throughout this year.

To Cyriane, Alec, Félicité and Baptiste: Thank you for enlightening my heart, making me laugh and accepting that I could not always open the door, play ball, listen to the whole story or catch frogs.

Finally, this project would not have been possible without the support of my wonderful wife, Gwenola. Thank you for your love, patience and enduring my character and my absences, this year and the years past.

TABLE OF CONTENTS

	Page
MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE	iii
ABSTRACT.....	iv
ACKNOWLEDGMENTS	v
TABLE OF CONTENTS.....	vi
ACRONYMS.....	viii
ILLUSTRATIONS	x
TABLES	xi
CHAPTER 1 INTRODUCTION	1
Introduction.....	1
Doctrine	3
Issues.....	7
Primary Research Question	8
Secondary research questions	8
Switzerland	8
Swiss Political System	9
Militia System	11
Switzerland's geostrategic situation	13
Swiss Neutrality	14
Organization of the Swiss Armed Forces	16
Assumptions.....	17
Definition of terms.....	19
Limitations	20
Scope and Delimitations	21
Significance of the study.....	22
CHAPTER 2 LITERATURE REVIEW	23
Introduction.....	23
<i>Armee 61</i> : the Swiss Armed Forces during the Cold War	25
Operational training and operations	31
Career officers	32
Defense reform in Europe at the end of the Cold War	33
The Security Policy Report (SPR) 1990 and <i>Armee 95</i>	36
Operational training	41

Operations	42
Career officers	43
Security Policy Report (SPR) 1999 and <i>Armee XXI</i>	44
Operational training and operational experience	54
Operations	55
Career officers	57
Security Policy Report 2010, 2015 and <i>Weiterentwicklung der Armee</i>	57
Doctrinal debate	64
Military innovation	67
The capabilities based assessment and the DOTMLPF-P framework	74
Summary and conclusions	76
CHAPTER 3 RESEARCH METHODOLOGY	79
CHAPTER 4 ANALYSIS	83
Introduction	83
Strategic tasks	84
Gaps between the strategic tasks and the <i>WEA</i> capabilities	88
Evolution of Swiss Armed forces doctrine and organization	94
Causes for doctrinal change in the Swiss Armed Forces	97
Swiss political-military mechanisms	100
Lessons from operations and major exercises	105
Constraints in Swiss strategic documents	107
Barriers to doctrinal evolution	111
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS	113
Conclusions	113
Recommendations	117
GLOSSARY	121
BIBLIOGRAPHY	123

ACRONYMS

APC	Armored Personnel Carrier
CBA	Capabilities Based Assessment
CBRN	Chemical, biological, radiological or nuclear
CDP	Christian Democratic Party, <i>Christlichdemokratische Volkspartei, Parti démocrate-chrétien</i>
CJCS	Chairman of the Joint Chiefs of Staff
COSOT	Chief of Staff for Operational Training, <i>Stabschef operative Schulung</i>
DOTMLPF-P	Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities and Policy
EU	European Union
EW	Electronic Warfare
LP	Liberal Party, <i>Freisinnig-Demokratische Partei, Parti Liberal Radical</i>
NATO	North Atlantic Treaty Organization
NBC-EOD	Nuclear Biological Chemical – Explosive Ordnance Disposal
NCO	Non-Commissioned Officer
NGO	Non-Governmental Organization
NSA	National Security Agency
OSCE	Organization for Security and Cooperation in Europe
PfP	Partnership for Peace
SPP	Swiss People's Party, <i>Schweizer Volkspartei, Union Démocratique du Centre</i>
SPR	Security policy report
SSP	Swiss Socialist Party, <i>Sozialdemokratische Partei der Schweiz, Parti socialiste suisse</i>
SWISSINT	Swiss Armed Forces International Command

TRADOC	Training and Doctrine Command
UN	United Nations
WEA	<i>Weiterentwicklung der Armee</i> , Continued Development of the Armed Forces (latest reform of the Swiss Armed Forces)
WEF	World Economic Forum

ILLUSTRATIONS

	Page
Figure 1. Doctrine as an element of DOTMLPF-P	5
Figure 2. Doctrine as bridge between the political level and Armed Forces	6
Figure 3. Members of NATO and EU in 2015	14
Figure 4. Analytical model	79
Figure 5. Evolution of sources for Armed Forces concepts	103
Figure 6. Evolution of sources for Armed Forces concepts	104
Figure 7. Organization and capabilities for support to civilian authorities	108

TABLES

	Page
Table 1. Votes concerning the Swiss Armed Forces since 1989	11
Table 2. Engagement of the Swiss Armed Forces in man days (thousands)	56
Table 3. Evolution of the Swiss Armed Forces	76
Table 4. Militia personnel evolution in the Swiss Armed Forces	77

CHAPTER 1

INTRODUCTION

Introduction

On May 18, 2014, the Swiss population refused the purchase of the *Gripen* jetfighter. For the first time in over 20 years, a popular vote went against the Swiss Armed Forces. The *Neue Zürcher Zeitung*, one of Switzerland's quality daily newspapers, interpreted the vote as a sign of the crumbling popular support for national defense.¹ On June 18, 2015, the Swiss National Council surprisingly rejected the projected Armed Forces reform *Weiterentwicklung der Armee* (WEA). This reform proposed to correct deficiencies by reducing the number of soldiers, reorganizing the command structure, decreasing the number of weeks of basic training, and reintroducing mobilization. This political decision pushed back reform implementation for at least one year.² The Armed Forces had been working on this project for over five years and had not anticipated such a delay. Once again, Armed Forces leadership had not been able to gather political support for a defense initiative. In both cases, political adversaries blamed the Armed Forces for

¹ René Zeller, “Mehr als ein Grounding,” *Neue Zürcher Zeitung* (Zürich), June 18, 2014, accessed October 8, 2015, <http://www.nzz.ch/meinung/kommentare/mehr-als-ein-grounding-1.18304828>.

² Beni Gafner and Daniel Ballmer, “Armee-Organisation droht der Zusammenbruch,” *Tages Anzeiger* (Zürich), June 29, 2015, accessed November 27, 2015, <http://www.tagesanzeiger.ch/schweiz/standard/Armee-Organisation-droht-der-Zusammenbruch/story/19661467>.

not having a clear concept.³ Six months before the popular vote on the *Gripen*, the Swiss Armed Forces had already made the headlines because of command failures in the major Armed Forces exercise *Stabilo Due*.⁴

An outside observer could wonder why the Swiss population and its representatives did not support a major acquisition and an important reform deemed necessary by its Armed Forces. During the Cold War, Switzerland was recognized as an example of effective conventional deterrence because of the implementation of its comprehensive defense strategy.⁵ How did the military institution lose the trust of the population which had so strongly supported their Armed Forces during the Cold War? For the military institution, a simple path would be to seek causes in external factors, such as societal change, political ambiguity, lack of communication, or an uncontrolled popular reaction. Instead, the military institution should explore the possibility of a lack of conceptual coherence. The start of such an exploration is situated at the intellectual core of the military institution, its doctrine. The purpose of this study is to evaluate the state of Switzerland's military doctrine and organizations after more than 20 years of reform, understand the causes of any deficiencies, and propose recommendations to

³ Philipp Loser, "Die neue Botschaft der Armeegegner," *Tages Anzeiger (Zürich)*, May 5, 2014, accessed March 20, 2016, <http://www.tagesanzeiger.ch/schweiz/standard/Die-neue-Botschaft-der-Armeegegner-/story/31940510>.

⁴ Francesco Benini and Daniel Meier, "Totales Versagen der Armeeführung" *Neue Zürcher Zeitung (Zürich)*, November 3, 2013, accessed 8 November 2015, <http://www.nzz.ch/totales-versagen-der-armeefuehrung-1.18178436>.

⁵ Barry R. Posen, *The Sources of Military Doctrine – France, Britain, and Germany between the World Wars* (London: Cornell University Press, 1984), 15.

amend the situation. Before beginning, the author will define doctrine and underline its relevance.

Doctrine

The Swiss Armed Forces definition of doctrine is “all the principles which explain how the Armed Forces or elements thereof, independently from a given situation, successfully fulfill their tasks in order to reach security policy or strategic goals.”⁶ The Swiss version resembles the US Department of Defense definition: “fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives.”⁷ These definitions explain the doctrinal function within the Armed Forces; however, they fail to give the broader purpose of doctrine for the military institution and in the realm of strategy.

For Herbert “doctrine is an approved, shared idea” which “can instill confidence throughout an army.” Furthermore, doctrine is the product of debate between officers and competition between schools of thought.⁸ As an idea, doctrine is an intellectual product

⁶ Swiss Armed Forces Staff, *Militärdoktrin 2017–Doktrin Grundlagen der Armee* (November 21, 2014), 6, (translation by author).

⁷ Department of Defense, Joint Publication (JP) 1-02, *Department of Defense Dictionary of Military and Associated Terms* (Washington, DC: Department of Defense, November 8, 2010), 71, accessed March 26, 2016, http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.

⁸ Paul H. Herbert, *Deciding What has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations* (Fort Leavenworth, KS: Combat Studies Institute, U.S. Army Command and General Staff College, 1988), 3.

of the military institution. Avant stated that doctrine falls between the details of tactics and the broad outline of grand strategy.⁹

Jackson¹⁰ described doctrine as the most visible expression of a military's belief system regarding accepted paradigms for the conduct of warfare.¹¹ He underlined the importance of doctrine to be explicit in order to ensure that its intellectual construct is sound.¹² For Jackson, doctrine has an undeniable role in the education of military professionals and in civil-military relationships.¹³

Posen described doctrine as a critical subcomponent of security policy, which deals with how and what military means will be utilized to respond to threats and opportunities.¹⁴ He also described doctrine as the reflection of judgment by military professionals and civilian leaders.

Based on his study of the evolution of US Army doctrine, Kretchik argued that doctrine served multiple purposes. Doctrine contains the “essence of how Army leadership has envisioned regulating the chaos of armed conflict through military

⁹ Deborah D. Avant, *Political Institutions and Military Change –Lessons from Peripheral Wars* (London: Cornell University Press, 1994), 3.

¹⁰ Aaron P. Jackson is a doctrine author with the Australian Defence Force.

¹¹ Aaron P. Jackson, *The Roots of Military Doctrine: Change and Continuity in Understanding the Practice of Warfare* (Fort Leavenworth, KS: Combat Studies Institute Press, 2013), 87, accessed November 6, 2015, <http://usacac.army.mil/Cac2/cgsc/carl/download/csipubs/RootsOfMilitaryDoctrine.pdf>.

¹² Ibid., 99.

¹³ Ibid., 47-57.

¹⁴ Posen, *The Sources of Military Doctrine*, 1.

operations.”¹⁵ Furthermore, he underlined the importance of doctrine to train and foster the development of tactics and operations, as well as its role in civil-military relationships.

Doctrine is an important element in the development of Armed Forces. The US Armed Forces use the doctrine, organization, training, materiel, leadership and education, personnel, facilities and policy (DOTMLPF-P) framework¹⁶ to describe the different components of operational capabilities. As illustrated in figure 1, when doctrine is synchronized with the remaining DOTMLPF-P domains, it provides the capabilities of the operational force.

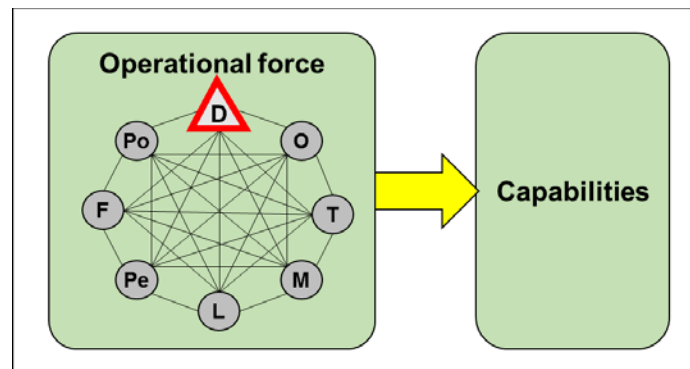


Figure 1. Doctrine as an element of DOTMLPF-P

Source: Created by author.

¹⁵ Walter E. Kretchik, *U.S. Army Doctrine—From the American Revolution to the War on Terror* (Lawrence, KS: University Press of Kansas, 2011), 278.

¹⁶ Chairman of the Joint Chiefs of Staff, CJCSI 3010.02D, *Guidance for the Development and Implementation of Joint Concepts* (November 22, 2013), accessed March 16, 2016, http://www.dtic.mil/cjcs_directives/cdata/unlimit/3010_02.pdf.

On the other hand doctrine, as illustrated in figure 2, is an intellectual bridge between the political level and the Armed Forces. Within the constitutional mandate, the political level affects doctrine through policy and strategy. Doctrine is created by the Armed Forces and is fundamental to the military institution. It is the framework for the use of force and the education of its members. Nevertheless, doctrine contributes to the political level's understanding of the use of force and the needs of the military institution.

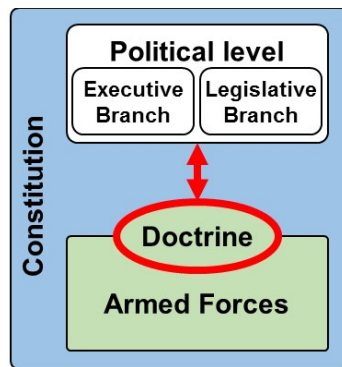


Figure 2. Doctrine as bridge between the political level and Armed Forces

Source: Created by author.

The author defines doctrine as an intellectual construct describing the use of military power to achieve strategic goals. Doctrine is created by the institutional force, within the constitutional framework and is guided by the government's strategy. Sound doctrine contributes to shared understanding within the military institution; as well as between the Armed Forces and the political level.

Issues

At the end of the Cold War, the Swiss government changed its national strategy. The strategic concept of security through cooperation replaced conventional deterrence. As described in article 58 of the 1999 federal constitution, the tasks of the Armed Forces are: “to prevent war and to maintain peace; to defend the country and its population. They shall support the civilian authorities in safeguarding the country against serious threats to internal security and in dealing with exceptional situations. Further duties may be provided for by law.”¹⁷

These constitutional and strategic alterations warranted change in the military institution. Consequently, the Swiss Armed Forces have been through two major reforms since 1989 and are preparing for a third. It is possible that, considering the popular refusal of the *Gripen*, parliamentary stalling, and the *Stabilo Due* exercise failure, current doctrine is insufficient.

The first issue is to understand the driving factors of military change or innovation. The second issue is to discover if the latest reforms in the Swiss Armed Forces only aimed to achieve the new strategy, security through cooperation, or if other considerations influenced the reforms. The third issue is to comprehend if current doctrine in spite of 25 years of reforms, contributes with the other domains of the DOTMLPF-P framework to fulfill the constitutional tasks of the Armed Forces.

¹⁷ *Federal Constitution of the Swiss Confederation*, April 18, 1999 (status as of 14 June 2015), accessed November 11, 2015, <https://www.admin.ch/opc/en/classified-compilation/19995395/201506140000/101.pdf>.

Primary Research Question

What doctrinal and organizational changes are required of the Swiss Armed Forces in order to fulfil their strategic tasks?

Secondary research questions

So as to answer the primary research question, seven secondary research questions require prior attention, specifically:

1. What are the Swiss Armed Forces strategic tasks extrapolated from the constitution and expressed in relationship to threat and time?
2. What are the gaps between the strategic tasks and the *WEA* capabilities?
3. How have the Swiss Armed Forces doctrine and organization evolved since the end of the Cold War?
4. What were the main causes of doctrinal change in the Swiss Armed Forces since 1989?
5. Which lessons from operations and major exercises are relevant for the development of doctrine and organizations?
6. Which constraints in Swiss strategic documents are caused by domestic political issues or military institutional resistance to change?
7. What are the barriers to doctrinal evolution in the Swiss Armed Forces?

Switzerland

Even though each country is unique, Switzerland stands apart with regards to its geo-strategic situation, its political system, and the Armed Forces organization. Before describing the structure of the study and in order to appropriately understand the context,

this section will present certain particularities of Switzerland: the political system, the militia system, the country's situation in Europe, and Swiss neutrality.

Swiss Political System

To appreciate the relevance of popular support for the Armed Forces, one must understand the Swiss political system. Switzerland is a confederation of 26 cantons.¹⁸ The cantons are sovereign for all matters that have not been delegated to the Federal State by the constitution. For example, the cantons are autonomous in the domains of police, school education, and tax collection. The federal legislative branch is composed of the National Council and the Council of States. The executive branch is composed of the Federal Council and the federal administration. The seven members of the Federal Council are elected by the two legislative councils. The first distinguishable trait of the Swiss political system is the consensus form of government which means that all major parties participate in the Federal Council.¹⁹ This form of government assures stability and pragmatic problem-solving. On the other hand, it is less effective for the implementation of major reforms.²⁰

Direct democracy is the second distinguishable trait of the Swiss political system. Swiss citizens can challenge any law with a referendum and amend the constitution with

¹⁸ There are actually 20 cantons and 6 half-cantons. The main difference is that half-cantons have only one representative in the Council of States.

¹⁹ As of the 2015 elections, the Federal Council is composed of 2 socialists, 2 liberals, 1 Christian-democrat and 2 members of the Swiss People's Party.

²⁰ Pietro Morandi, "Démocratie de concordance," *Dictionnaire historique de la Suisse*, last modified August 22, 2005, accessed March 28, 2016, <http://www.hls-dhs-dss.ch/textes/f/F10095.php>.

an initiative. Therefore, the Swiss population can impose change to any political course of action. All the domains of the state have been subject to either a referendum or an initiative. The Swiss Armed Forces have also been regularly challenged by votes over the last 25 years, mainly by the “*Groupe pour une Suisse sans Armée*” (GSOA). GSOA is a political organization, created in the pacifist movement of the 1980s, which uses demonstrations, publications and popular initiatives with the aim to abolish the Swiss Armed Forces.²¹ The different votes are depicted in table 1.

This absolute form of democratic control compels the military to clearly explain their mission and its execution to the population. The main advantage of this system is that it imposes transparency on the Armed Forces bureaucracy. Disadvantages include a lack of certainty for planning purposes and the penetration of political considerations into military matters. The requirement to convince the population is reinforced by the militia system of the Swiss Armed Forces.

²¹ Bernard Degen, “Groupe pour une Suisse sans Armée (GSsA),” *Dictionnaire historique de la Suisse*, last modified July 6, 2006, accessed March 15, 2016, <http://www.hls-dhs-dss.ch/textes/f/F15312.php>.

Table 1. Votes concerning the Swiss Armed Forces since 1989		
Year	Proposal	Decision
1989	Abolish the Swiss Armed Forces	Refused by 64.4%
1993	Refuse new fighter aircraft for ten years	Refused by 57.2%
1994	Swiss armed participation in U.N. missions	Refused by 57%
1997	Ban on weapon exports	Refused by 77.5%
2000	Split by two defense spending	Refused by 62.4%
2001	Abolish the Swiss Armed Forces	Refused by 78.1%
2002	Join U.N.	Accepted by 56.4%
2003	Implement <i>Armee XXI</i>	Accepted by 76%
2008	Prohibit jet aircraft flight in recreational areas	Refused by 68.1%
2011	Prohibit keeping weapons	Refused by 56.3%
2013	Abolish conscription	Refused by 73.2%
2014	<i>Gripen</i> purchase	Refused by 53.4%

Source: Swiss Federal Statistical Office, “Votations, Données détaillées,” accessed March 21, 2016, <http://www.bfs.admin.ch/bfs/portal/fr/index/themen/17/03/blank/data/01.html>.

Militia System

The militia system is a pillar of Swiss identity that organizes public life requiring apt citizens to assume unpaid public functions.²² In Switzerland, this applies to politics and firefighting at the local level, legislative activities at the cantonal and national level, as well as activities in private associations. The Swiss military has been organized as a militia system since the Middle-Ages. The current constitution requires the Armed Forces to be a militia. The Swiss militia system has evolved over the years, but the basic concept remains the same. Conscription applies to all male Swiss citizens. After recruit training

²² Andreas Kley, “Système de milice,” *Dictionnaire historique de la Suisse*, last modified January 19, 2010, accessed March 1, 2016, <http://www.hls-dhs-dss.ch/textes/f/F43694.php>.

school, the soldier is incorporated into an active unit and required to complete a number of refresher courses until a determined age. During recruit training school, non-commissioned officers and officers are selected and complete training before integrating an active unit. Future captains are selected during refresher courses, complete training, and then return to their units. Further, officers can pursue militia functions in battalion, brigade or higher level staffs. Brigade and battalions are composed only of enlisted and officer militia.

There are approximately 1,050 career officers and 950 career non-commissioned officers, who primarily assume functions in training and high level staffs. Most professional cadre will hold a militia position in addition to their professional function. Four traits define the Swiss militia system compared to other military organizations. First, a high percentage of the male population are incorporated in the Armed Forces. Second, citizens have a long dwell time in the Armed Forces. Third, training periods are numerous and staggered. Fourth, officers and non-commissioned officers have a militia status.²³

The militia system allows the Armed Forces to reduce the military-civil divide, integrate the civilian skills of its soldiers, and reduce costs. However, the system limits available training time and requires mobilization. Popular support of the Armed Forces militia system has dropped from 84 percent in 1983 to 58 percent in 2015, with a low of

²³ Karl W. Haltiner, "Was unterscheidet die Schweizer Miliz von anderen Armeen?" *Allgemeine schweizerische Militärzeitschrift*, 5 (1998): 12, accessed January 2, 2016, <http://retro.seals.ch/cntmng?pid=asm-004:1998:164::916>.

43 percent in 2006. At the same time, support for a professionalization of the Armed Forces has regularly been lower.²⁴

Switzerland's geostrategic situation

From today's territorial perspective, Switzerland has an ideal position. The country is surrounded by friendly democratic countries with no viable military threat. Furthermore, it is nested in one of the most stable regions of the world, where nations have actively integrated politically and economically.²⁵ The EU and NATO are the two most important security organizations in Europe and have contributed to the security of Switzerland. Most European countries are members of the EU or NATO, with 21 countries belonging to both organizations. Switzerland's four largest neighbors, Germany, France, Italy and Austria are members of the EU. Except from Austria, all are members of NATO. The map at figure 3 illustrates Switzerland's environment. Switzerland is not a member of either organization. During the last part of the nineteenth century and most of the twentieth century, Europe was either ravaged by war or split by the blocs of the Cold War. In this period, Switzerland relied mainly on neutrality to avoid conflict.

²⁴ Tibor Szvircsev Tresch, Andreas Wenger, Thomas Ferst, Sabrina Pfister, and Andrea Rinaldo, *Sicherheit 2015* (Zürich: Center for Security Studies, ETH Zürich and Militärakademie an der ETH Zürich, 2015), 143, accessed November 10, 2015, <http://www.css.ethz.ch/publications/pdfs/Sicherheit-2015.pdf>.

²⁵ Federal Council, *Rapport du Conseil fédéral sur la politique de sécurité de la Suisse* (June 23, 2010), 20, accessed November 11, 2015, <http://www.vbs.admin.ch/internet/vbs/fr/home/documentation/bases/sicherheit.parsys.5013.downloadList.36678.DownloadFile.tmp/sipolbf.pdf>.

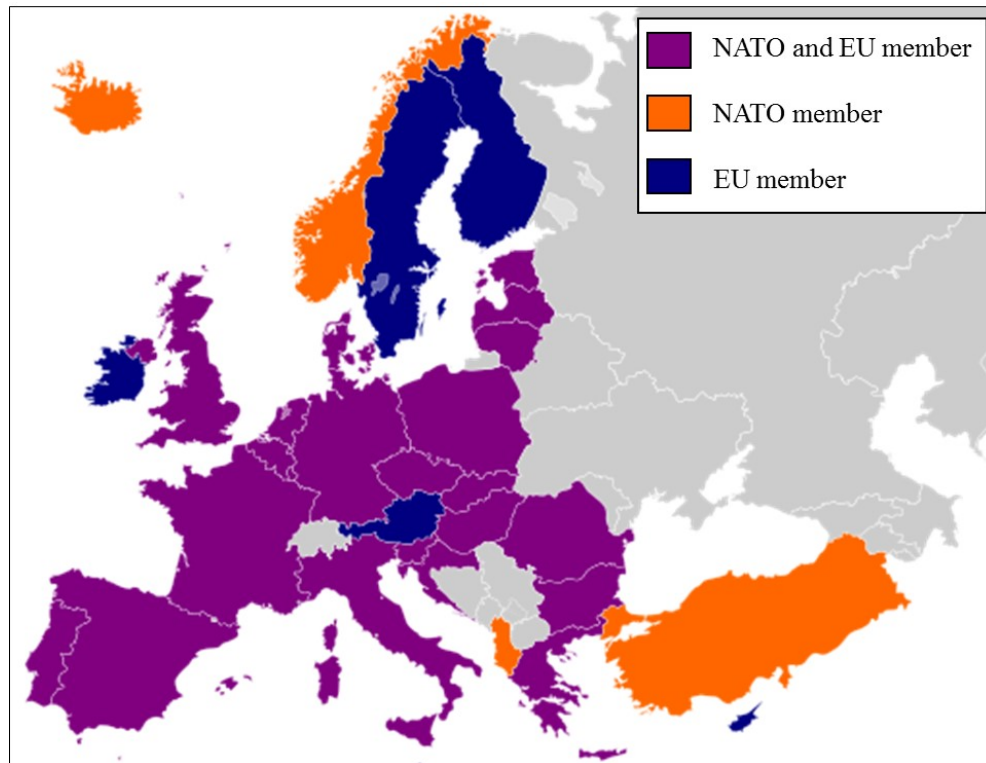


Figure 3. Members of NATO and EU in 2015

Source: Joebloggsy, Wikimedia Commons, accessed March 26, 2016, https://commons.wikimedia.org/wiki/File:EU_and_NATO.svg.

Swiss Neutrality

Neutrality has protected Switzerland from internal and external tensions since the Middle Ages. In 1815 at the Congress of Vienna, the European powers recognized the country's perpetual neutrality. Up to this point, Swiss cantons had provided mercenaries to warring countries and had not applied neutrality rigorously.²⁶ Neutrality had important

²⁶ Hans-Ulrich Jost, "Congrès de Vienne: quand l'Europe fonde la Suisse moderne," *L'Hebdo*, October 10, 2014, accessed February 29, 2016, <http://www.hebdo.ch/hebdo/id%C3%A9es-d%C3%A9bats/detail/congr%C3%A8s-de-vienne-quand-l%E2%80%99europe-fonde-la-suisse-moderne>.

integrative and protective functions for the Swiss nation trapped at the fringes of the French, German, and Italian national movements.²⁷ In 1848, neutrality was mentioned in the country's first constitution. For the next 60 years, Switzerland unilaterally reinforced the role of neutrality by hosting international conferences and organizations, and by proposing arbitrations. The Hague convention of 1907 internationally codified the law of neutrality. Switzerland remained neutral during World War I, avoiding external threats and internal tensions. After a brief period of differential neutrality, as part of the Society of Nations, Switzerland returned to integral neutrality on the eve of World War II. During the Cold War, a strict doctrine of neutrality going beyond legal obligations guided Swiss foreign policy. Even if Switzerland hosted the European headquarters of the UN, as well as a large number of international organizations and conferences, the country refused to join the UN or the European Community.

At the end of the Cold War, the Federal Council and political organizations pushed for a more flexible understanding of neutrality and initiated different actions towards increased integration and participation in existing international structures: in 1992 a request for candidacy was presented to the EU; in 1996 Switzerland joined the Partnership for Peace and presided over the OSCE; and in 1998 a popular initiative proposed to join the UN (in 2002 Switzerland would become the 190th member of the organization). In 1993, the Swiss Federal Council published a White Paper on Neutrality to clarify the country's position with regards to the new strategic context. The report

²⁷ Alois Ricklin, "Neutralité," *Dictionnaire historique de la Suisse* (2010), last modified November 9, 2011, accessed February 29, 2016, <http://www.hls-dhs-dss.ch/textes/f/F16572.php>.

stated that neutrality was compatible with the U.N. framework.²⁸ However, the push for more international participation was met by the growth of national-conservative forces which opposed international integration and adhered to a strict neutrality policy. The national-conservative Swiss People's Party representation in the National Council grew from 11 percent in 1987, doubled to 22.5 percent in 1999, and in 2015 was at 29.4 percent.²⁹

Additional initiatives and referendums halted the evolution of Swiss foreign policy. On December 6, 1992, the Swiss population refused the ratification of the country's entry into the European Economic Area, bringing the European integration of the country to a halt. On June 12, 1994, the Swiss population did not accept the law which would have allowed Swiss soldiers to participate in United Nations peace-keeping missions, halting further military integration. Considering the highly popular support for neutrality, Switzerland will probably remain neutral in the future. Indeed, from 1990 to 2015, the approval of neutrality within the population ranged from 79 to 95 percent.³⁰

Organization of the Swiss Armed Forces

The Swiss Armed Forces are led by the Chief of the Armed Forces, a three star general officer. The Armed Forces are composed of the Staff of the Armed Forces, the

²⁸ Swiss Department of Foreign Affairs, *White Paper on Neutrality* (November 29, 1993), 19, accessed November 10, 2015, https://www.eda.admin.ch/content/dam/eda/en/documents/aussenpolitik/voelkerrecht/White_Paper_on_Neutrality.en.pdf.

²⁹ Swiss Federal Statistical Office, "Force of parties in %," accessed March 21, 2016, http://www.bfs.admin.ch/bfs/portal/fr/index/themen/17/02/blank/key/national_rat/parteienstaerke.html.

³⁰ Szvircsev et al., *Sicherheit 2015*, 116.

Armed Forces Joint Staff, the Land Forces, the Air Force, the Armed Forces College Command, the Armed Forces Logistics Organization and the Armed Forces Command Support Organization.

The Special Forces, the Armed Forces International Command, and the NBC-EOD Centre of Competence are organically assigned to the Armed Forces Joint Staff. The Land Forces are composed of four training brigades (tank / artillery, infantry, engineer / rescue, logistics), two tank brigades, four infantry brigades, four territorial regions, and two reserve brigades. The Air Force is composed of three training brigades (command and support, flight training, air defense artillery) and the air component command. As of 2015, 170,369 militia personnel serve in the Armed Forces. In 2015 militia personnel accomplished approximately 5,800,000 days of service, over 96 percent in training.³¹

Assumptions

The first assumption for this research is that US Armed Forces doctrine can be used as benchmark. US military thought is dominant in the Western Hemisphere and strongly influences military doctrine of Western countries, including Switzerland because “the center of military thought has normally tended to follow the center of military power.”³²

³¹ Swiss Armed Forces, *Rapport annuel de l'Armée suisse 2015* (2016), accessed April 26, 2016, http://www.vtg.admin.ch/internet/vtg/fr/home/dokumentation/publik_zeitschr/jabe.parsysrelated1.38039.downloadList.27704.DownloadFile.tmp/81129dfijabe2015.pdf.

³² Azar Gat, *A History of Military Thought: From the Enlightenment to the Cold War* (Oxford, UK: Oxford University Press, 2001), 107.

The second assumption is that notwithstanding 150 years of peace and stability, Switzerland and its Armed Forces have to prepare for a possible deterioration of the security environment. US Armed Forces doctrine states: “the strategic security environment is characterized by uncertainty, complexity, rapid change, and persistent conflict. This environment is fluid, with continually changing alliances, partnerships, and new national and transnational threats constantly appearing and disappearing.”³³ Even if improbable in varying degrees, two negative evolutions are possible. First, the development of a large persistent terrorist or hybrid threat within Europe, which could impact Switzerland. Second, the dissolution of EU and NATO followed by the apparition of a hybrid state or state-like threat, which would compel Switzerland to overhaul its strategy.

The third assumption is that a government can rapidly make unorthodox political decisions, even in a country with slow political mechanisms such as Switzerland. Even without abandoning neutrality, Swiss participation in an EU battle group or in a peace-support operation in a hostile environment is possible. The fourth assumption is that, while conceiving doctrine, military professionals cannot shun the two prior assumptions, either for political or institutional reasons. Political and institutional constraints have to be integrated into doctrine, but cannot serve as a substitute for intellectual honesty. The fifth assumption is that as a bureaucracy, the Armed Forces are resistant to change.

³³ Department of Defense, Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States* (Washington, DC: Department of Defense, March 2013), I-10, accessed March 26, 2016, http://www.dtic.mil/doctrine/new_pubs/jp1.pdf.

Definition of terms

Armee 61 [Armed Forces 61]. Designation of the Swiss Armed Forces between 1961 and 1994.

Armee 95 [Armed Forces 95]. Designation of the Swiss Armed Forces between 1995 and 2003.

Armee XXI [Armed Forces XXI]. Designation of the Swiss Armed Forces since 2004.

Defense competence. Ability of the Armed Forces to maintain the core capabilities related to the defense of the country in order to build-up the complete defense in the case of the reemergence of a state based threat. Defense competence includes maintaining trained personnel and material.

Gesamtverteidigung [Total Defense]. Organization of all the means of the Federal State, the cantons, and the economy to face an aggressor.

Hybrid warfare. For several years, the term hybrid warfare has been the object of debate in military publications. US Army doctrine³⁴ and Swiss Armed Forces doctrine³⁵ use the term. Hybrid warfare is understood as a combination of regular, irregular, terrorist and criminal threats used by a state or non-state actor.

Institutional force. It supports the operational force by raising, training, equipping, deploying and preparing the force. These actions also mirror the description of the Armed Forces being a large bureaucracy, which is often found in literature.

³⁴ Department of the Army, Army Doctrine Publication (ADP) 3-0, *Unified Land Operations* (Washington, DC: Government Printing Office, October 10, 2011), 4.

³⁵ Swiss Armed Forces Staff, *Militärdoktrin 2017*, 54.

Operational force. The operational force conducts operations. The size and organization of the Swiss Armed Forces complicates a clear separation between the operational and the institutional force. The territorial regions, brigades and Air Component Command are part of the operational force. Even though the Armed Forces Joint Staff has administrative functions it is the sole joint headquarters of the Armed Forces and should be considered as a part of the operational force.

Security Policy Report (SPR). The SPR is a strategic document published by the Federal Council that describes threats and dangers, strategy, and tasks of the different instruments of security policy.

Threats and dangers. SPRs differentiate dangers and threats. A threat includes a will to harm Switzerland. To the contrary, dangers, such as man-made or natural disasters, do not have a will.³⁶

Weiterentwicklung der Armee (WEA). WEA is the Armed Forces reform initiated by the SPR 2010. Literally *Weiterentwicklung der Armee* can be translated as the continued development of the Armed Forces.

Limitations

The changes in Switzerland's political landscape over the past 25 years have affected the development of strategy and doctrine; however, a detailed analysis of this landscape would go beyond the scope of this research. This research will not include the study of disaster relief operations by the Swiss Armed Forces. These operations are important; however, they are undisputed and limited in scope. Jackson divides doctrine

³⁶ Federal Council, *Rapport sur la politique de sécurité de la Suisse*, 2010, 11.

manuals in the technical, the tactical, the operational and the military strategic schools.³⁷ The topic of this research is limited to doctrine at the operational and military strategic level. This study will use both US joint and Army doctrine as a benchmark, even though it focuses on the Swiss Armed Forces.

Scope and Delimitations

This research commences with a review of Swiss security policy and Armed Forces reforms from the Cold War to 2015, within the context of sweeping European societal, political and security changes in order to reveal the tenets of the Armed Forces evolution. Pertinent literature on military innovation will enable the construction of a model to facilitate the understanding of interactions leading to doctrinal change.

The analysis will start by extrapolating four strategic tasks from the constitution in relation to the operational environment, threat, and time considerations. The author will then conduct a capabilities based assessment of the strategic tasks and the DOTMLPF-P framework of the *WEA* Armed Forces. This assessment will reveal gaps in the doctrinal, organizational, material and personnel domains. Subsequently, the analysis will focus on doctrine and organizations and analyze their evolution since the end of the Cold War. The analytical model will be used to discover the causes of doctrinal change and deduct that reform was not initiated by the quest to fulfill the strategic tasks. Next, the author will demonstrate that lessons from current successful operations are less relevant than deficiencies in major Armed Forces exercises. Constraints in the strategic guidelines stemming from domestic political issues or military institutional resistance to

³⁷ Jackson, *The Roots of Military Doctrine*, 11.

change, and barriers to doctrinal change will then be identified. Finally, the conclusion proposes to merge doctrine and training, create an overarching Armed Forces doctrine, enhance training at the operational level, adapt headquarter manning and roles, integrate international and single-service soldiers in the main body of the operational force and clearly separate force development and security policy.

Significance of the study

In recent years, Swiss Armed Forces reforms have focused on practical considerations affecting the servicemen as well as broader strategic considerations relating to Switzerland's international role. Doctrine has often been a secondary consideration. This study will focus on doctrine at the confluence of politics, institutional conservatism and military innovation since this is where the essence of the Armed Forces resides. Sound doctrine and coherent organizations enables the military institution to build trust and a shared understanding within the organization. This study identifies several critical challenges and proposes possible solutions for developing coherent responses to the threats of today's operational environment.

CHAPTER 2

LITERATURE REVIEW

Introduction

Military institutions constantly adapt to their enemies, to new technologies, and to changes in their domestic political environment in order to prepare for the next conflict or crisis. This chapter will review the major changes of the Swiss security policy and Armed Forces from the Cold War to 2015, within the context of sweeping societal, political and security changes. The chapter will also review literature pertinent to military innovation in order to understand the driving factors of reform, which is a form of innovation.

First, this chapter will review the evolution of Swiss security policy and the Armed Forces over the last 25 years, divided in sections along the different Armed Forces reforms: *Armee 61*, *Armee 95*, *Armee XXI* and *WEA*. The author will present the main elements of defense reform in Europe at the end of the Cold War in order to understand the environment of the *Armee 95* and *Armee XXI* reforms. The reports of the Federal Council on security policy and the Armed Forces, further official documents and statistics published online by the Swiss Department of Defense as well as operational level regulations provide primary sources for the review of this evolution.

Specific information concerning operational training and operations during the analyzed period enables the discovery of possible gaps in the operational force. Reviewing the evolution of the role and education of career officers is necessary because well-formed and experienced officers are essential to establishing coherent doctrine. The Swiss Armed Forces do not possess a professional officer corps, similar to the ones found in most Western Armed Forces. Career officers are recruited among militia officers and

continue to retain a militia function for a majority of their career. Military professionals have to receive education at the tactical, the operational and the strategic levels.³⁸ Recruiting sufficient and adequately trained career officers has been a challenge for the Swiss Armed Forces since the 19th century.³⁹

Second, the review of several publications concerning military innovation and change will lay the foundations for an analytical model, which will be presented in chapter three. Third, the author will present literature pertaining to US Armed Forces adaptation mechanisms and the DOTMLPF-P framework. Finally, the conclusion will consist of an overview of the main tenets of the military reforms and the personnel reductions.

Before investigating the evolution of the Swiss Armed Forces after the Cold War, the reader has to understand the country's dense and integrated defensive concept that led to the popular saying: "Switzerland does not have an army, Switzerland is an army."⁴⁰

³⁸ Alan Okros, *Leadership in the Canadian Military Context* (Toronto, CA: Canadian Forces College, 2010), 39, accessed March 28, 2016, http://www.defence.gov.au/ADC/Docs/CDLE/CDLE_120329_OkrosA2010LeadershipintheCanadianMilitaryContext.pdf.

³⁹ Michael M. Olansky and Dominique Moccand, "Treten an Ort? Die schweizerische Instruktionsproblematik aus historischer Perspektive," *Military Power Review der Schweizer Armee*, 1/2015 (May 2015): 68, accessed November 6, 2015, http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.37117.DownloadFile.tmp/mpr115.pdf.

⁴⁰ John A. Mcphee, *La Place de la Concorde Suisse* (New York: Farrar/Straus/Giroux, 1984), 136.

Armee 61: the Swiss Armed Forces during the Cold War

The development of the Cold War concepts stemmed from lessons of the Second World War. Surrounded by a formidable foe and lacking proper armament, the Swiss higher command renounced defending the most populated areas of the country. The Armed Forces deterred aggression by holding in the Alps with infantry units and threatening to destroy the lines of communications between Germany and Italy. After the war, two schools of thought debated on the required military capabilities of a small and neutral country. The offensive school proposed creating, whatever the cost, modern mechanized Armed Forces which would seek offensively to destroy the enemy. The defensive school advocated sustainable infantry based Armed Forces which would defend the country with defensive strongpoints spread across the country.⁴¹

Armee 61, the designation of the Swiss Armed Forces during the Cold War, was organized according to a parliamentary decree promulgated in 1961. The task of the Armed Forces was to first dissuade an aggressor from attacking the country, then to ensure with military operations the independence and integrity of the country.⁴² The Federal Council suggested that due to technological evolution, the Swiss Armed Forces could not accomplish this task with a static defense or a partisan army. The task called for

⁴¹ Hans Senn, “Sind Struktur und Einsatzkonzeption unserer Armee überholt?” *Allgemeine schweizerische Militärzeitschrift*, 1 (1984): 7, accessed February 12, 2016, <http://retro.seals.ch/digbib/view?pid=asm-004:1984:150::910>.

⁴² Federal Council, *Message du Conseil fédéral à l'Assemblée fédérale concernant l'organisation de l'armée* (Feuille Fédérale, July 21, 1960), 323, accessed February 13, 2016, <http://www.amtsdruckschriften.bar.admin.ch/viewOrigDoc.do?id=10095868>.

a mobile force with strong air defense and aviation.⁴³ The implementation of *Armee 61* required a new organization, new material, and new age classes. The Armed Forces were composed of a mountain corps, three field corps (each comprised of a newly created mechanized division, a field division and a border division) and an independent Air Force, which included air defense troops. With the creation of the mechanized division, the Swiss Armed Forces entered the era of combined arms warfare.

In 1964, the concept of a modern mobile force was abruptly halted, when the Swiss parliament cut the number of planned *Mirage IIIS* jetfighters in half due to massive cost overruns.⁴⁴ The aircraft had been the first major acquisition of *Armee 61* and was planned to be the cornerstone of the Air Force. With this decision, successful implementation of the offensive doctrine as presented in 1960 was impossible; yet, the government continued with the acquisition of other material and investment in defense and training infrastructure. The *Mirage IIIS* acquisition greatly deteriorated civil-military relations. For the first time in Swiss history, a parliamentary investigative commission was set up resulting in the resignation of the Chief of the General Staff, and the end of the political career for the Federal Councillor in charge of the Department of Defense.⁴⁵

⁴³ Ibid., 330.

⁴⁴ Peter Braun, “Die Armee 61: Einsatzdoktrin Heeresorganisation materielle Rüstung,” in *Die Planung der Abwehr in der Armee 61*, ed. Peter Braun, and Hervé de Weck (Bern: Schweizerische Vereinigung für Militärgeschichte und Militärwissenschaft, 2009), 22.

⁴⁵ Paolo Urio, “L'affaire des Mirages,” *Dictionnaire historique de la Suisse*, last modified April 29, 2008, accessed March 29, 2016, <http://www.hls-dhs-dss.ch/textes/f/F17348.php>.

In 1966, the Federal Council presented a report on national defense which defined the doctrinal approach during the Cold War and set the conditions for appropriate financial planning. After the shortcomings of the *Mirage IIIS* acquisition, the government realized that a small and neutral Switzerland could not keep up financially with the evolution of military technology. Potentially facing massive conventional and nuclear forces, the Federal Council barred the concept of a decisive offensive operation and proposed the *Abwehr* [Combined Defense] doctrine. The main idea was to canalize the enemy with multiple defense zones echeloned in depth using the country's advantageous terrain, then destroy enemy penetration by mechanized counterattacks.⁴⁶

In 1966, the first military regulation, describing doctrine at the operational level, *die Weisungen für operative Führung 1966* was published. The first part detailed a possible enemy's course of action, which mirrored the Warsaw Pact's procedures, and tasks, characteristics, and principles of the Swiss Armed Forces. The second part, titled “in war”, presented the Swiss way of war, and clearly stated that cooperation with the enemy of an enemy is acceptable at the start of the conflict.⁴⁷ The document described how the Swiss Armed Forces were to protect the border, survive the use of weapons of mass destruction, hold key terrain, inflict heavy casualties through mechanized counterattacks, and continue guerilla operations. These indications gave a clear concept

⁴⁶ Federal Council, *Rapport du Conseil fédéral à l'Assemblée fédérale concernant la conception de la défense nationale militaire* (Feuille Fédérale, June 6, 1966), 883, accessed February 13, 2016, <http://www.amtsdruckschriften.bar.admin.ch/viewOrigDoc.do?id=10098105>.

⁴⁷ Swiss National Defense Commission, *Weisungen für die operative Führung 1966* (April 17, 1966), 10.

for planning and preparation for the subordinate levels. For the next 25 years the Swiss Armed Forces planned, prepared and trained to the principles depicted in this document. Organizational challenges were overcome at the lowest possible level of command. However, the actions of the Armed Forces were not yet nested in an overall strategic approach using all the means of the state to protect the population from the effects of modern war.

The 1973 security policy report (SPR) finally placed the Armed Forces within a comprehensive understanding of national defense. After presenting the goal of maintaining Switzerland's independence, the report described the threat, adding terrorism and subversion to the conventional and mass destruction threat, and then presented seven strategic components of national defense: diplomacy, Armed Forces, Civil Protection, war economy, information, state security and infrastructure. The strategy was focused on conventional deterrence. The first task of the Armed Forces was to prevent war through the means of highly ready conventional force.⁴⁸ If deterrence failed, the Armed Forces were tasked to defend the country at the border to prevent the enemy from achieving its operational level objectives, then to maintain at least a part of the territory under Swiss sovereignty, and finally in case of defeat, to conduct a guerilla resistance.

The 1973 SPR remained focused on the adequate governmental and military response to the military threat, even though it stated that the evaluation of new threats

⁴⁸ Federal Council, *Rapport du Conseil fédéral à l'Assemblée fédérale sur la politique de sécurité de la Suisse* (Feuille Fédérale, June 27, 1973), 118, accessed November 11, 2015, <http://www.amtsdruckschriften.bar.admin.ch/viewOrigDoc.do?id=10101333>.

was necessary.⁴⁹ The 1973 SPR described the strategic organs of *Gesamtverteidigung* [Total Defense] which had been put in place at the national level to assist the Federal Council during a crisis. The strategic organs were the Council, the staff, and the central office for *Gesamtverteidigung* [Total Defense].⁵⁰ Their creation enabled Switzerland to provide a comprehensive answer to strategic challenges including all relevant security partners, such as the General Staff, Civil Protection, cantons and the office of war economy. Even though the strategic organs of *Gesamtverteidigung* [Total Defense] were implemented with a military perspective, the broad membership enabled the Federal Council to use them for any crisis situation.

In 1975, the Federal Council published the first master plan for the Armed forces⁵¹ which did not change any conceptual elements, but formalized tasks and procedures. For the first time the government had published a comprehensive security policy report and an Armed Forces level master plan. The 1975 master plan described three tasks for the Armed Forces: deter, fight the battle, and support civilian authorities.

The 1975 master plan precisely described the military consequences of contemporary conflicts and technological advances, and further called for change without initiating a major reform. The increased battlefield lethality was answered by increasing the protection and mobility of troops. The rapidity of modern operations, coupled with

⁴⁹ Ibid., 115.

⁵⁰ Ibid., 139-140.

⁵¹ Federal Council, *Rapport du Conseil fédéral à l'Assemblée fédérale sur le plan directeur de la défense militaire des années 80* (Feuille Fédérale, September 29, 1975), 1722-1742, accessed November 11, 2015, <http://www.parlament.ch/f/dokumentation/dossiers/dossiers-archiv/sipol/Documents/sipol-11-740-bericht-f.pdf>.

the high readiness of troops in Europe, was a challenge for the Swiss militia because it needed a relatively long time to achieve the necessary readiness after mobilization.

Therefore, the Swiss Armed Forces painstakingly planned in order to be able to mobilize and achieve operational readiness within 48 hours.⁵² All units were assigned a precise mobilization area stocked with their material and ammunition. Units also planned their training and defensive positions in detail. Fortress artillery, machine gun positions, and the prepared demolition of bridges, narrow roads, and bottlenecks further enhanced defensive readiness. The ground forces were spread across the entire country in order to deny the enemy the possibility to exploit gaps.

The 1975 master plan also recognized the risk to the population and critical infrastructure from the effects of weapons and indirect warfare. The Armed Forces could be called on to support cantonal police forces in case of massive violence to protect critical infrastructure against sabotage and to help save lives due to the effects of weapons or natural disasters.⁵³

The doctrine laid out in 1966 enabled the acquisition of modern armament which fit into the overall concept: in 1968 the self-propelled M109 howitzer and a Swiss made tank series; in 1975 the F-5 fighter; in 1977 the anti-tank guided missile *Dragon*; in 1984 the air defense missile *Rapier*; in 1986 the anti-tank guided missile *TOW 2*; and in 1987 the main battle tank *Leopard II*.

⁵² Franz Betschon, “Mobilmachung und Einsatzbereitschaft,” in *Erinnerung an die Armee 61* ed. Franz Betschon and Louis Geiger (Frauenfeld: Verlag Huber, 2009), 148-149.

⁵³ Federal Council, *Plan directeur de la défense militaire des années 80*, 1736.

Switzerland had reached a degree of defense readiness which was even recognized in popular culture. However, this readiness was founded on threat based reasoning, a doctrinal approach prescribed in policy and efficient and precise planning. While the US Army had rediscovered the operational level of war and proceeded to create quality doctrine during this period, the Swiss Armed Forces had not developed a culture of creating military doctrine.

The mobilization organization could not easily be changed because of the logistical infrastructure.⁵⁴ Planning, preparing, and training in the same framework for years created favorable conditions for the successful employment of the militia and shared understanding; however, it also created a “static way of thinking”⁵⁵ which limited creativity. These conditions would create a formidable hurdle for Armed Forces development when the Soviet threat eventually disappeared.

Operational training and operations

The Swiss Armed Forces have always been challenged to measure their readiness and gather operational experience. The Armed Forces had a tradition of large exercises in order to evaluate the performance of Army Corps. In 1974, authorities created the position of *Stabschef operative Schulung* or chief of staff for operational training (COSOT) because they realized that the reciprocal training by army corps staffs was not

⁵⁴ Carlo Vinzenz, “Führung der Armee Beitrag der Miliz,” in *Erinnerung an die Armee 61*, ed. Franz Betschon and Louis Geiger (Frauenfeld: Verlag Huber, 2009), 78.

⁵⁵ Carlo Vinzenz, “Neues, operatives Denken ist gefordert: ein Einstieg in die neue Doktrin der Schweizer Armee,” *Allgemeine schweizerische Militärzeitschrift*, 4 (1994): 7, accessed November 8, 2015, <http://retro.seals.ch/cntmng?pid=asm-004:1994:160::769>.

sufficient.⁵⁶ The COSOT was deputy of the Chief of the General Staff and was responsible for all Armed Forces and army corps exercises.

Major General Gustav Däniker was COSOT from 1980 to 1988. Under his leadership the Command for Operational Training grew into a recognized organization including approximately one hundred experienced militia officers. The exercises conducted by the Command for Operational Training instilled shared understanding at the operational level of war in the military institution.⁵⁷

The Swiss Armed Forces gathered limited experience from their operations during the Cold War. Between 1954 and 1994, the Swiss Armed Forces assisted in the protection of seven Geneva conferences.⁵⁸ Switzerland's military contribution to peace support was limited to the Neutral Nations Supervisory Commission in Korea.

Career officers

During the Cold War, the Army Corps and militia officers were responsible for training and leading military units.⁵⁹ Career officers were designated as instructors and were mainly employed in basic training, officer schools, or in General Staff functions. Until the rank of general, all career officers also had a parallel militia function.

⁵⁶ Michael Arnold, "Operative Schulung (I): Auseinandersetzung mit einem Erbe," *Allgemeine schweizerische Militärzeitschrift*, 7 (July 2015): 39.

⁵⁷ Ibid., 40.

⁵⁸ Claude Bonard, "L'armee suisse lors de la venue de Yasser Arafat," *Revue militaire suisse*, 11 (1997): 14, accessed April 24, 2016, <http://www.e-periodica.ch/cntmng?var=true&pid=rms-001:1997:142::921>.

⁵⁹ Simon Küchler, "Die überlegene Stärke der Miliz," in *Erinnerung an die Armee 61*, ed. Franz Betschon and Louis Geiger (Frauenfeld: Verlag Huber, 2009), 114.

Career officers received the same training as their militia peers and gathered most of their knowledge through exercises. Once they became career officers, they received a yearlong education. Continuing education was provided throughout their career; however, it focused mostly on tactical, educational and administrative issues. The Swiss Armed Forces sent career officers abroad to professional military education institutions in order to complete their operational and strategic level education. Recruiting sufficient career officers has always been a challenge for the Swiss Armed Forces. In the 1970s, 25 percent of the authorized positions were not staffed⁶⁰ and the 1975 master plan underlined the need to fill the missing instructor slots.⁶¹

Defense reform in Europe at the end of the Cold War

The end of the Cold War brutally jolted the Swiss neutrality – militia paradigm. What had seemed perpetual was questioned by politicians, scholars, and the population. With the fall of the Soviet Union and the Warsaw Pact in 1991, the European strategic environment changed radically. The 45 year long static setting of the Cold War, with two huge opposing military alliances facing each other, was replaced by 10 years of dynamic evolution on the Old Continent. East and West Germany reunified. The existing countries of Eastern Europe and new countries emerging from the dissolution of the Soviet Union strived to become democracies and detach themselves from Russian influence. The brutal partition of Yugoslavia brought conflict back to Europe. Most countries sought prosperity by joining the EU and security by joining NATO.

⁶⁰ Olansky and Moccand, *Military Power Review der Schweizer Armee*, 69.

⁶¹ Federal Council, *Plan directeur de la défense militaire des années 80*, 1740.

The global context also fundamentally changed. In 1991, the largest coalition since the Korean War defeated Iraqi Forces which had invaded Kuwait. In 1994, the Rwandan genocide shocked the world. In 1996, the Taliban took power in Afghanistan. The number of United Nations sponsored peace-keeping missions increased dramatically. There had been 15 such missions between 1948 and 1988. From 1989 to 2004, 44 new missions commenced.⁶² Peace-keeping missions, in mostly intra-state ethnic conflicts, challenged the European Armed Forces which had trained for territorial defense against a state aggressor.

The disappearance of a major threat and the appearance of new threats prompted European countries to start major defense reforms. NATO refocused on crisis response operations, and the EU, its common defense policy rejuvenated by the 1992 Petersberg Declaration, issued guidelines for European countries. NATO's Partnership for Peace program provided a platform to cooperate bilaterally with the alliance.

Historic NATO members downsized and reorganized their forces to answer the challenges of new expeditionary peace support missions. Germany had to integrate the Armed Forces of East Germany. Existing countries from the Warsaw Pact had to restructure and downsize their militaries, and improve the democratic control of their Armed Forces with dwindling resources in order to enter NATO. Countries emerging with the dissolution of the Soviet Union or Yugoslavia had to create Armed Forces from scratch. The military trends during this era of reform were, “from territorial defense to crisis management; from standing forces to mobile forces and operations; from

⁶² United Nations, “List of peacekeeping operations 1948-2013,” accessed January 1, 2016, <http://www.un.org/en/peacekeeping/documents/operationslist.pdf>.

conventional to unconventional; from force-oriented to effect oriented; from conscripts to professionals; from antagonistic to cooperative.”⁶³ These trends fundamentally affected European armed forces in their doctrinal, organizational, material and personnel domains.

One of the major effects from these reforms was the abandonment of conscription for European Armed Forces. The four main factors which led European countries to abandon conscription were social, economic, technological and geostrategic. First, the individualization of Western society discouraged young men from accepting the restrictions of serving in the armed forces. Second, a smaller professional force was more cost effective than a large conscript force. Third, conscripts could not use new highly technological weapon systems adequately. Finally, only professional Armed Forces achieved the readiness and proficiency to respond to international crises.⁶⁴ In 2011, only 16 out of 44 European countries with armies still applied conscription.⁶⁵

This environment also affected transformation of the Swiss Armed Forces. Two of the main trends in European transformation, collective security and professionalization of the Armed Forces, were opposed to the two major traditional pillars of Swiss security policy: neutrality and the militia concept. Switzerland struggled to find its place in a new international context. Many officers and politicians were convinced that closer

⁶³ Mika Kerttunen, “Reforms in Finnish Defense,” in *Post-Cold War Defense Reform* ed. Istvan Gyarmanti and Theodor Winkler (Washington DC: Brassey's, 2002), 221.

⁶⁴ Tibor Szvircsev Tresch, *Europas Streitkräfte im Wandel: Von der Wehrpflichtarmee zur Freiwilligenstreitkraft* (Zürich, 2005), 211-215.

⁶⁵ European Bureau for Conscientious Objection, “Conscription status map,” accessed January 1, 2016, <http://ebco-beoc.org/node/86>.

cooperation with European partners was inevitable. The conditions for the first major reform of the Armed Forces in Switzerland in 25 years were set.

The Security Policy Report (SPR) 1990 and *Armee 95*

In 1988, the civilian Chief of Staff of the Department of Defense initiated a reform to streamline the department and reduce Armed Forces personnel. The threat from the Soviet Union had diminished. Negative demographic trends necessitated an adaptation of manning.⁶⁶ Finally, the government was keen to reduce military spending.

The chief of the General Staff planned to implement the reform in 1995, which was thereafter called *Armee 95*. The fall of the Berlin Wall forced the government to conduct a strategic analysis. In the spring of 1990, the head of the Department of Defense called on a small group of specialists to produce a draft of a strategic document.⁶⁷ The Federal Council published the SPR in October 1990 which redirected Swiss strategy. The strategy was to “promote peace by cooperation and mutual aide, prevent war through the capability to defend the country, contribute to the safe guard of vital needs, and maintain an adequate preparation.”⁶⁸

⁶⁶ Swiss Department of Defense, *EMD-Studienkommission 96 für strategische Fragen* (June 5, 1996), accessed April 3, 2016, <https://www.admin.ch/cp/d/1996Jul17.112106.6317@idz.bfi.admin.ch.html>.

⁶⁷ Bruno Lezzi, “Schweizer Armee zwischen Tradition und neuen Realitäten,” *Neue Zürcher Zeitung* (Zürich), September 27, 2009, accessed October 8, 2015, <http://www.nzz.ch/die-armee-zwischen-traditionellen-bindungen-und-neuen-realitaeten-1.2828467>.

⁶⁸ Federal Council, *Rapport du Conseil fédéral sur la politique de sécurité de la Suisse* (Feuille Fédérale, October 1, 1990), 795, accessed January 6 2016, <http://www.parlament.ch/f/dokumentation/dossiers/dossiers-archiv/sipol/Documents/sipol-90-061-bericht-f.pdf>. (translation by author).

The 1990 SPR stated that all security policy instruments had to adapt to the new rapidly evolving strategic situation. Due to the uncertainty of the situation, a change of neutrality policy was not recommended.⁶⁹ The military threat of the East-West confrontation was ceding its place as the main risk to the Swiss society to a combination of possible risks stemming from demographic, ecologic, economic and social evolution. The 1990 SPR underlined that a large number of Swiss citizens, worried by the speed of evolution, answered with a propensity to isolation.⁷⁰ However, European states were becoming increasingly interdependent in economic, political and social aspects and the continent was building supra-national structures. Most of Switzerland's leaders pushed for integration because Switzerland approved the principle of a free, strong and democratic Europe. The Federal Council and the population were at a critical crossroads, the choice between isolation and integration, which would affect the understanding of neutrality.⁷¹ In the 1990 SPR, the Federal Council refused the call by certain scholars to enlarge security policy to encompass the responses to dangers to the vital needs of the society.⁷² Nevertheless, the Federal Council declared that future challenges could be mastered by adapting the means of the time. The main effort of security policy remained

⁶⁹ Ibid., 797.

⁷⁰ Ibid., 798.

⁷¹ Ibid., 780.

⁷² Dominique Wisler, "Vers une nouvelle politique de securite," *Zürcher Beiträge zur Sicherheitspolitik und Konfliktforschung Heft Nr 11* (Forschungsstelle für Sicherheitspolitik und Konfliktanalyse ETHZ, 1989), 31, accessed April 5, 2016, http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/zb_11.pdf.

the response to political-military threats.⁷³ The 1990 SPR underlined the importance of reducing the impact of military life on militia personnel.⁷⁴

In 1992, two years after the publication of the 1990 SPR, the Federal Council published the master plan for *Armée 95*. Those two years were marked by the 1991 Gulf War and the start of the Balkan wars. The consequences of these two conflicts were not completely implemented in the doctrine proposed by the *Armée 95* master plan. The *Armée 95* master plan described the major causes of Armed Forces reform, the factors influencing the decision, the main elements of doctrine, and the organizational elements of *Armée 95*, such as manning, training, structure and periods of service.

The reform downsized the Armed Forces from 600,000 to 400,000 personnel by dropping the age of service from 50 to 42. The number of service days were furthermore diminished by reducing the length of basic training from 17 to 15 weeks, and by going to biennial, instead of annual, refresher courses.

Over 1700 units and headquarters were disbanded; however, the operational structure of a General Staff, four Army Corps and the Air Force was maintained. The three mechanized divisions were transformed into five tank brigades. Three regimental-size alert units, which could mobilize within hours, were assigned to the protection of the main cities in Zürich, Bern and Geneva.⁷⁵

⁷³ Federal Council, *Rapport sur la politique de sécurité de la Suisse*, 1990, 801.

⁷⁴ *Ibid.*, 830.

⁷⁵ Federal Council, *Rapport du Conseil fédéral aux chambres fédérales concernant la conception de l'armée dans les années nonante* (Feuille Fédérale, January 27, 1992), 935-937, accessed March 16, 2016, <http://www.amtsdruckschriften.bar.admin.ch/viewOrigDoc.do?id=10106882>.

The defense doctrine outlined in the *Armee 95* master plan was designated *dynamische Raumverteidigung* [Dynamic Defense].⁷⁶ The doctrine was founded on territorially organized light infantry forces which protected critical infrastructure, intelligence sensors which recognized an enemy's intent, troops holding fortified strongpoints, an air defense system which enabled the engagement of ground forces, and the use of operational level mechanized counterattacks supported by fire in order to destroy the enemy.

The doctrine was an adaptation of the *Abwehr* [Combined Defense] doctrine, occupying strong terrain in fortified positions, degrading the enemy with mechanized counter-attacks, and preparing to resist. The novelty was the abandonment of the all-around defense in favor of a defensive main effort. The plan to occupy the entirety of the territory with light infantry units enabled the protection of critical infrastructure and support to civilian authorities.

The *Armee 95* master plan assumed the country would maintain the national *Gesamtverteidigung* [Total Defense] organization and kept the concept of mobilization. *Armee 95* planned to contribute up to 600 personnel for UN peacekeeping missions, but did not foresee any permanent structure or organization for peace-support operations.⁷⁷ The *Armee 95* master plan detailed an acquisition plan for the next 20 years, including

⁷⁶ Ibid., 922-923.

⁷⁷ Ibid., 939.

jetfighters, electronic warfare material, infantry fighting vehicles, armored personnel carriers, long-range artillery, air defense systems, and training simulators.⁷⁸

Before the publication of regulations, the ideas regarding the doctrine were distilled among militia officers who could provide their input.⁷⁹ Such contributions improved the understanding of the new doctrine and provided the doctrine writers with feedback. In 1994, the Armed Forces published the operational level regulation *Operative Führung 95*. The document described a possible threat and the functions of the Armed Force's organizations within the [Dynamic Defense] doctrine. The regulation nested the actions of the Armed Forces within the needs of *Gesamtverteidigung* [Total Defense].⁸⁰ The function relating to peace support operations was to provide enough trained forces for missions.⁸¹ The regulation gave pragmatic explanations and was the tool to spread the new doctrine to a militia officer corps reluctant to change.⁸²

The fall of the Berlin Wall, the 1991 Gulf War, and the Balkan conflicts radically changed the strategic environment and *Armee 95* was already outdated at the time of its

⁷⁸ Ibid., 981 - 982.

⁷⁹ Lukas Landmann, "Dynamische Raumverteidigung Fünf Thesen zu Armee 95," *Allgemeine schweizerische Militärzeitschrift*, 9 (1991): 492-495, accessed November 8, 2015, <http://retro.seals.ch/cntmng?pid=asm-004:1991:157::1145>.

⁸⁰ *Operative Führung* (OF 95) Regulation, January 1, 1994, 9.

⁸¹ Ibid., 13.

⁸² Gustav Däniker, "Die «Operative Führung» Starthilfe für die «Armee 95»," *Allgemeine schweizerische Militärzeitschrift*, 6 (1994): 21, accessed November 8, 2015, <http://retro.seals.ch/cntmng?pid=asm-004:1994:160::832>.

implementation.⁸³ Furthermore, in June 1994, Swiss voters refused the participation of armed Swiss soldiers in UN missions. This vote was a setback for setting up international operations for the Swiss Armed forces.

From the start, *Armee 95* also faced critical challenges in training, readiness, and manning. In July 1996, less than two years after the implementation of *Armee 95*, the Department of Defense created the commission for strategic studies, composed of 40 personalities from politics, academia, administration and economy. The commission's report called for a more international approach to Swiss security policy and led to the next major reform of the Armed Forces.

Armed Forces leadership focused on ways to improve training and manning. Lieutenant General Jacques Dousse, chief of training at the time, outlined in a 1999 interview solutions to the challenges faced by the Armed Forces.⁸⁴ He proposed to shorten the training of lieutenants, hire contract servicemen to reinforce training, and return to the annual refresher course rhythm.

Operational training

With the reform *Armee 95* and the passage to biennial refresher courses, it was impossible to conduct major exercises with troops. The Operational Training Command

⁸³ Markus Mäder, "Euro-atlantischer Streitkräftewandel nach dem Kalten Krieg—wo steht die Schweizer Armee?" *Bulletin 2001 zur schweizerischen Sicherheitspolitik* (2001): 59.

⁸⁴ Jacques Dousse interviewed by Charles Ott, "Warten auf die Garantearbeiten für die Armee 95," *Allgemeine schweizerische Militärzeitschrift*, 7/8 (1999): 10-11, accessed April 9, 2016, <http://www.e-periodica.ch/digbib/view?pid=asm-004:1999:165::1011#378>.

was also merged within the General Staff structure.⁸⁵ In the first years of *Armee 95*, the Chief of Staff for Operational Training (COSOT) maintained staff exercises in order to teach the new regulations. In 1998, the COSOT was convinced of the necessity to continue training. He also proposed the use of operational exercises as test beds for new structures and to contribute to the education of future general officers.⁸⁶ However, the decision to start a new reform process stalled operational level training because Operational Training Command personnel were engaged in the planning of the next reform, causing major operational exercises to disappear until 2007.

Operations

In February 1999, following the arrest of Abdullah Öcalan, Kurdish demonstrators provoked violent outbreaks in several Swiss cities and attacked diplomatic representations. The Federal Council tasked the Armed Forces to protect embassies and consulates in Bern, Geneva and Zürich. This engagement continues to this day. During the 1999 war in Kosovo, soldiers were engaged at the border to support dealing with refugees. In January 2003, the Swiss Armed Forces contributed for the first time to the protection of the World Economic Forum in Davos. Protection for this important annual international conference also continues up to this day. In June 2003, France hosted the G8

⁸⁵ Jean-Pierre Badet, “Die operative Schulung heute und morgen,” *Allgemeine schweizerische Militärzeitschrift*, 3 (March 2005), 18, accessed April 6, 2016, <http://www.e-periodica.ch/cntmng?var=true&pid=asm-004:2005:171::1037>.

⁸⁶ Dominique Juilland, “Der Stab Operative Schulung an der Schwelle des nächsten Jahrtausends,” *Allgemeine schweizerische Militärzeitschrift*, 1 (January 1998), 7-8, accessed January 2, 2016, <http://retro.seals.ch/digbib/view?pid=asm-004:1998:164::20>.

summit in Evian. Tens of thousands of demonstrators were expected in Switzerland. The Swiss Armed Forces supported the protection of the summit with over 5,000 soldiers, organized in an air and a land task force in a combined operation with France.⁸⁷

The end of the Cold War marked the start of Swiss participation in peace support operations. Swiss Armed Forces provided a medical unit for the UN transition assistance group in Namibia in 1989, and from 1991 to 1994 for the UN mission in the Western Sahara. Since 1990, the Swiss Armed Forces provided observers to multiple UN missions. From 1996 to 2000, the Swiss Armed Forces supported OSCE operations in Bosnia with an unarmed contingent. Since 1999, the Swiss Armed Forces provided an armed reinforced company to NATO operations in Kosovo.⁸⁸ These international contingents were composed of volunteer soldiers, who had been recruited, organized and trained by the Swiss Armed Forces International Command (SWISSINT).

Career officers

In 1989, as the need to change the Armed Forces emerged, Major General Hans Bachofner stated the Swiss Armed Forces lacked officers who could think beyond their function, due to the limited investment in officer education. The militia officer could not take time away from his principal occupation, and the few career officers were primarily

⁸⁷ Robert Riedo, “Schutz der G8-Konferenz von Evian,” *Allgemeine schweizerische Militärzeitschrift*, 7-8 (2003): 14-15, accessed April 24, 2016, <http://www.e-periodica.ch/digbib/view?pid=asm-004:2003:169#420>.

⁸⁸ Bruno Lezzi, “Der Kampf für Blauhelme im Rückblick: Neutralitätsparole gegen modernere Sicherheitspolitik,” *Neue Zürcher Zeitung* (Zürich), August 6, 2013, accessed 8 November 2015, <http://www.nzz.ch/schweiz/neutralitaetsparole-gegen-modernere-sicherheitspolitik-1.18128119>.

instructors for the militia.⁸⁹ Accordingly, Armed Forces leadership decided to invest more in the initial education of career officers and created the Military Command School in 1993, which offered a three year course fulfilling the broader educational needs.⁹⁰ The *Armee 95* master plan called for an increase in the number of career officers to improve the quality of training in order to compensate for the reduction of training time.⁹¹

Security Policy Report (SPR) 1999 and *Armee XXI*

The 1999 SPR proposed a radically new strategy, security through cooperation, and built the political foundation for the reform *Armee XXI*. The new strategy was a consequence of major changes in the operational environment and organizational struggles with the *Armee 95* reform. The operational environment was characterized by the evolution of military technology, an outburst in violent intrastate conflicts, and threats which required a persistent domestic engagement of the Armed Forces (embassy protection). The 1991 US campaign in Iraq demonstrated the dominance of deep and precise reconnaissance and strike, stealth, and computerized command and control.

⁸⁹ Hans Bachofner, “Armee im Wandel,” *Allgemeine schweizerische Militärzeitschrift*, 10 (1989): 635-636, accessed November 8, 2015, <http://retro.seals.ch/digbib/view2?pid=asm-004:1989:155::776>.

⁹⁰ Hansruedi Ostertag, “Armee im Wandel,” *Allgemeine schweizerische Militärzeitschrift*, 2 (1995): 3-6, accessed April 23, 2016, <http://www.e-periodica.ch/digbib/view?pid=asm-004:1995:161#68>.

⁹¹ Federal Council, *Rapport concernant la conception de l'armée dans les années nonante*, 971.

The 1999 SPR modified the understanding of security policy from reacting to interstate conflicts to “preventing and overcoming violence of strategic impact.”⁹² In this regard, the main threats were: an increase of internal conflicts in the world, the proliferation of weapons of mass destruction and ballistic missiles, restrictions to trade, negative economic, social and ecologic developments in the world, attacks against computer and communication infrastructure, terrorism, extremism, espionage and organized crime. The risk of natural or technological disasters also had been taken into account.

The security through cooperation strategy proposed cooperation at two levels, the international level and the national level, marking the passage from a strategy of dissuasion to a strategy of cooperation.⁹³ Even though Switzerland had increased international security commitments since the end of the Cold War, the proposed level of international cooperation was revolutionary in that it called for Switzerland to maximize the possibilities of international collaboration and for a reevaluation of permanent neutrality. International cooperation was not presented as a sacrifice, but as the best opportunity to counter emerging threats.⁹⁴ An autonomous defense was considered infeasible and overly expensive. In order to demonstrate solidarity and share risks with

⁹² Federal Council, *Rapport du Conseil fédéral à l'Assemblée fédérale sur la politique de sécurité de la Suisse*, June 7, 1999, accessed December 18, 2015, <http://www.vbs.admin.ch/internet/vbs/fr/home/documentation/bases/sicherheit.parsysrelated1.50662.downloadList.70459.DownloadFile.tmp/sipol2000f.pdf>, 9, (translation by author).

⁹³ Ibid., 57.

⁹⁴ Ibid., 34.

the international community, operations had to go beyond what had been done up to that date.⁹⁵ Joining NATO was not necessary because cooperation could be achieved without membership through the Partnership for Peace program and bilateral agreements. The 1999 SPR called for close cooperation with the fledgling EU security architecture and highlighted the development of combined joint tasks forces, as pillars of NATO's command structure.⁹⁶

At the national level, the Cold World era *Gesamtverteidigung* [Total Defense] organization was abandoned. The 1999 SPR proposed the creation of an Apparatus for Strategic Direction, providing flexibility and integrating the cantons. A civilian staff was created and manned; however, it was disbanded in 2011 following internal governmental tensions.⁹⁷

The 1999 SPR also rearticulated the defensive task of the Armed Forces. The Armed Forces had to be prepared to conduct *Raumsicherung* [area security], the protection of strategic sectors and infrastructure below the threshold of war, and to defend the country independently or allied with other states.⁹⁸ However, the readiness of the defense requirements were reduced because the strategic situation allowed time for a build-up of the Armed Forces in case of an increased threat.

⁹⁵ Ibid., 47.

⁹⁶ Ibid., 29.

⁹⁷ Press release of the Federal Council, “Der Bundesrat regelt die sicherheitspolitische Führung effizienter,” August 24, 2011, accessed April 14, 2016 <https://www.news.admin.ch/message/?lang=de&msg-id=40719>.

⁹⁸ Federal Council, *Rapport sur la politique de sécurité de la Suisse*, 1999, 59.

Armed Forces planners had already begun working on the new reform, named *Armee XXI* before the publication of the 1999 SPR. In May 2001, the Department of Defense published the *Armee XXI* master plan, which reviewed the main points of the 1999 SPR, proposed several additional points relevant to the development of the Armed Forces in Europe, and then described the main tenets of the reform. Quantitatively, the *Armee XXI* master plan provided more emphasis on organizational matters, such as training, manning, logistics and financing, rather than doctrine.

Four of the international trends described by the *Armee XXI* master plan laid the foundation of the reform. First, the reduction in the Armed Forces size led to the decrease of the age of service.⁹⁹ Second, the increased professionalization of Armed Forces led to the creation of the single-service soldier and the contract serviceman. Third, the flattening of military structures led to the system of modularity and abolished the regimental, divisional, and corps levels of command. Fourth, the trend for increased investment in technological solutions to improve protection and effectiveness led to the abandonment of all light infantry units.

With regards to doctrine, the *Armee XXI* master plan presented the range of military operations (peace support, defense, support of civilian authorities), the Armed Forces engagement principles (importance of the human factor, necessary anticipation, proportionality, focalization and integration of forces), the description of symmetrical and asymmetrical warfare, the role of the Armed Forces as a partner in national and

⁹⁹ Swiss Department of Defense, *Plan directeur de l'A XXI* (May 2, 2001), 8-9, accessed March 18, 2016, <https://www.parlament.ch/centers/documents/fr/armee-21-alb-entwurf-f.pdf>. Ibid.

international cooperation, tiered readiness (*abgestufte Bereitschaft*), build-up (*Aufwuchs*), and the implementation of the Armed Forces' tasks.

Tiered readiness and build-up were fundamentally new concepts to replace the mobilization concept.¹⁰⁰ Due to the low conventional threat, only units preparing for international missions, *Raumsicherung* [area security] or support to civilian authorities required a higher state of readiness. These units were to be manned mainly by contract or single service servicemen,¹⁰¹ which was also a new concept for the Swiss Armed Forces. The build-up concept implied that the Armed Forces would need several years before being able to defend the country autonomously because reserve units required training and material. However, the *Armee XXI* master plan recognized that the “acquisition of complex weapon systems abroad would probably not be possible”¹⁰² and that it was impossible to plan the build-up in detail. The *Armee XXI* master plan stated that the Swiss Armed Forces should try to maximize defense competence autonomy, but due to the lack of resources, cooperation with other states was a necessity.¹⁰³

Concerning the implementation of peace support operations, the *Armee XXI* master plan stated that the current recruiting system did not allow the required increase in personnel in the short-term, and did not describe how the mid-term increase would be

¹⁰⁰ Ibid., 23-26.

¹⁰¹ Ibid., 18.

¹⁰² Ibid., 26 (translation by author).

¹⁰³ Ibid., 16.

achieved. The plan only stated that the professional component of the Armed Forces would have to be increased by 2010 to fulfill the personnel requirements.¹⁰⁴

The new *Raumsicherung* [area security] operation was vaguely described. With this type of operation, the Armed Forces countered a strategic asymmetrical threat by engaging two to three brigades to protect the border, key areas, lines of communication, critical infrastructure and safeguard aerial sovereignty.¹⁰⁵ The detailed cooperation with civilian authorities was not depicted.

The *Armee XXI* master plan introduced the deep – close – rear framework for defense operations. This framework was most certainly imported and adapted from US Army's 1993 FM 100-5.¹⁰⁶ The disrupting effect of natural and man-made obstacles, which was a historical mainstay of Swiss military action, disappeared and was replaced by deep fires. However, the Swiss Armed Forces had neither long-range ground fires nor air-ground capabilities. Tank brigades were the decisive element at the operational level.¹⁰⁷ The *Armee XXI* master plan stated that the ballistic missile threat could only be countered through international collaboration. Subsidiary security operations in support of civilian authorities were described as the protection of persons, infrastructure or the border.

¹⁰⁴ Ibid., 29.

¹⁰⁵ Ibid., 30.

¹⁰⁶ Department of the Army, Field Manual (FM) 100-5, *Operations* (Washington, DC: Government Printing Office, June 14, 1993), 6-14 - 6-15, accessed April 23, 2016, http://www.fs.fed.us/fire/doctrine/genesis_and_evolution/source_materials/FM-100-5_operations.pdf.

¹⁰⁷ Swiss Department of Defense, *Plan directeur de l'A XXI*, 32.

Raumsicherung [area security] and the use of the deep – close – rear framework in defense operations were new doctrinal concepts; however, these concepts were not based on a comprehensive explicit doctrine. Christian Catrina, who at the time was deputy chief of the 1999 SPR project team, stated that there was no time to establish precise doctrine.¹⁰⁸

The organization of the Armed Forces changed radically with *Armee XXI*. The General Staff, the four Army Corps and the Air Force organization was discarded. *Armee XXI* was composed of two services, Army and Air Force, led by the joint staff (*Führungsstab*) and supported by a logistics organization and a command support organization. The joint staff was a new command, manned primarily by professional personnel (career officers and Armed Forces civilians), who had to assume numerous functions ranging from the planning and executing of joint operations, evaluating the feasibility of operations in support of civilian authorities, integrating and coordinating the operations of the Army and the Air Force, training brigade and territorial region staffs to the joint training of the Army and Air Force staffs.

The model of training was also radically changed. The *Armee XXI* master plan proposed the following: an increase of basic training length from 15 to 24 weeks;¹⁰⁹ the transfer of training responsibility to career officers; the utilization of contract soldiers to conduct initial training; the return of annual refresher courses; a system which would

¹⁰⁸ Christian Catrina, “Defense Reform in Switzerland,” in *Post-Cold War Defense Reform* ed. Istvan Gyarmanti and Theodor Winkler (Washington DC: Brassey's, 2002), 16.

¹⁰⁹ Eventually the parliament would accept an increase to 21 weeks.

enable new recruits to complete officer training within a year; and the return of combined arms training in refresher courses.

The *Armee XXI* master plan proposed to decrease the Armed Forces from 400,000 to 200,000 soldiers, by reducing the age of service from 42 to 34. Soldiers would complete six refresher courses and then be transferred into the reserve. The Department of Defense proposed to implement the reform within two years.

A citizens committee gathered the necessary votes to force a referendum concerning *Armee XXI*. The committee's arguments against the reform were that the reform did not provide a plausible response to new threats and that with the personnel reduction, the country could not be defended.¹¹⁰ The Federal Council's main arguments for the reform were that the *Armee XXI* was a flexible response to current threats within constrained budgetary resources.¹¹¹ On May 18, 2003, the Swiss population accepted the reform with 76 percent of the votes, and *Armee XXI* was implemented on January 1, 2004.

From the start, *Armee XXI* faced multiple challenges, particularly an inability to recruit enough single service soldiers as well as major deficiencies in the personnel and logistics domains. These challenges were further hindered by budgetary restrictions.

¹¹⁰ Bruno Lezzi, "Gegner der Armee XXI schiessen sich ein," *Neue Zürcher Zeitung* (Zürich), October 9, 2002, accessed April 23, 2016, <http://www.nzz.ch/article8G68Z-1.430066>.

¹¹¹ Federal Council, *Explications du Conseil fédéral quant à la votation du 18 mai 2003* (2003), 5, accessed April 9, 2016, <https://www.bk.admin.ch/themen/pore/va/20030518/index.html?lang=fr>.

Between 1999 and 2006 defense spending shrank 13 percent.¹¹² The lack of single-service soldiers led to the utilization of combat battalions to protect embassies which led to diminished capabilities for these units. The implementation of the reform did not go smoothly and the Department of Defense presented multiple corrections. By the end of 2005, less than two years after the start of the reform, the necessity for substantial adaptation was clear.¹¹³

Furthermore, the threat assessment by the Swiss government changed due to the September 2001 terrorist attacks and the ensuing wars conducted by the USA and allies in Iraq and Afghanistan, the reactions to the Mahomet cartoons, and the 2004 NATO enlargement. Terrorism was considered the biggest threat by the Federal Council.¹¹⁴ The development of EU battle groups also presented a compelling cooperation opportunity. In 2006, the Federal Council decided to change the organization of the Armed Forces by reducing the number of active brigades from nine to six, reducing the number of tank, artillery and air defense battalions, and by increasing the number of infantry battalions. The two tank brigades became the core of a possible defense competence build-up. The main effort in investment and training was Raumsicherung [area security] and support to

¹¹² Federal Council, *Message concernant les modifications de l'organisation de l'armée et de la loi fédérale instituant des mesures destinées à améliorer les finances fédérales* (May 31, 2006), 5920, accessed April 23, 2016, <https://www.admin.ch/opc/fr/federal-gazette/2006/5899.pdf>.

¹¹³ Federal Council, *Examen des objectifs de l'armée – Rapport à l'attention de l'Assemblée fédérale* (December 31, 2005), 88, accessed March 26, 2016, <http://www.vbs.admin.ch/internet/vbs/fr/home/documentation/bases/verteidigung.parsys.0009.downloadList.00091.DownloadFile.tmp/bericht2005149bmgf.Pdf>.

¹¹⁴ Federal Council, *Message concernant les modifications de l'organisation de l'armée* (May 31, 2006), 5913.

civilian authorities. The reduction of the defense capability of the Armed Forces completed the transformation of the mechanized units of the Armed Forces. The mechanized units were no longer a force with a necessary readiness, but a core from which a force should be able to grow. This reduction was only acceptable within domains in which a “timely build-up was not at risk.”¹¹⁵ Several conservative organizations and the Swiss People's Party opposed this adaptation, stating that the defense of the country or even an eventual build-up were not possible.¹¹⁶

The implementation of *Raumsicherung* [area security] operations was also contested. The Swiss Armed Forces emulated from US experience in Iraq. After observing demonstrations of tanks used among the population,¹¹⁷ cantons and constitutionalists questioned the legal and doctrinal framework of *Raumsicherung* [area security]¹¹⁸ and left-wing parties opposed the constabularisation of the Armed Forces. In 2009, the head of the Department of Defense decided to publish a new SPR since 10

¹¹⁵ Peter Braun and Daniel Fuhrer, “Die geplante Weiterentwicklung der Schweizer Armee (WEA) in ihrem historischen und internationalen Kontext,” *Military Power Review der Schweizer Armee*, 2/2013 (December 2013): 25, accessed November 7, 2015, http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.27059.DownloadFile.tmp/mpr213.pdf.

¹¹⁶ Federal Council, *Message concernant les modifications de l'organisation de l'armée* (May 31, 2006), 5936.

¹¹⁷ Alex Reber, “Raumsicherung – moderne Landesverteidigung,” *Allgemeine schweizerische Militärzeitschrift*, 4 (2008): 20, accessed April 9, 2016, <http://www.e-periodica.ch/digbib/view?pid=asm-004:2008:174#159>.

¹¹⁸ Markus H. F. Mohler, “Raumsicherung–Verfassungsrechtliche Fragen zur jüngsten Entwicklung in Rechtsetzung, Doktrin und Reglementierung über den Einsatz der Armee,” *LeGes*, 3 (2008): 437-463, accessed April 14, 2016, <https://www.bk.admin.ch/themen/lang/00938/02124/04296/index.html?lang=de>.

years had passed since the publication of the last SPR, the strategic environment had changed, and the Armed Forces were facing organizational and doctrinal challenges.

Operational training and operational experience

In 2004, Major General Jean-Pierre Badet, who took over the function of Chief of Staff for Operational Training (COSOT) was tasked to rebuild operational training for the Armed Forces.¹¹⁹ At the start of *Armee XXI*, the Command for Operational Training was directly subordinated to the Chief of the Armed Forces. In 2006, the Command was relegated to a lower hierarchical level.¹²⁰ The first staff exercises in 2005 and 2006 for the joint staff clearly demonstrated several gaps in planning and producing orders.¹²¹ In 2007, the COSOT conducted the exercise *Stabilo 07*, the first operational level joint exercise concerning area security. The results of *Stabilo 07* demonstrated that the Armed Forces had several limitations: ineffective operational level command structure, a lack of joint synchronization, no doctrinal publications at the strategic and operational level, a lack of common doctrinal understanding of area security, absence of interoperable command systems, a lack of integrated planning procedures, and challenges in the civil-

¹¹⁹ Jean-Pierre Badet, “Die operative Schulung heute und morgen,” *Allgemeine schweizerische Militärzeitschrift*, 3 (March 2005): 18, accessed April 6, 2016, <http://www.e-periodica.ch/cntmng?var=true&pid=asm-004:2005:171::1037>.

¹²⁰ Juerg Oberholzer, “Aus der Werkstatt des Stabschefs Operative Schulung,” *Allgemeine schweizerische Militärzeitschrift*, 7/8 (2006): 14, accessed March 17, 2016, <http://retro.seals.ch/cntmng?pid=asm-004:2006:172::1398>.

¹²¹ *Ibid.*, 15.

military cooperation.¹²² The exercise lessons were logged, a training plan was established, and the next major exercise was scheduled for 2012.

In 2012, the COSOT conducted the exercise *Stabilo Due*. The same deficiencies that hampered operations in 2007 remained. The joint staff was unable to properly accomplish its tasks and the final report again listed numerous shortcomings. The *Neue Zürcher Zeitung* titled an article relating to this exercise: “Total failure of Armed Forces command” and politicians demanded further explanation from the head of the Department of Defense and the Chief of the Armed Forces.¹²³

Operations

Table 2 presents the number of man days accomplished by militia and career military personnel in operations since the start of *Armee XXI*. The last row contains the total amount of service days which militia personnel accomplished in a given year in training or operations. The operations are split in subsidiary security, disaster relief, peace support, and general support operations. Subsidiary security operations encompass support to police or border guards for the protection of foreign diplomatic representations in Switzerland, Swiss embassies abroad, international conferences or events, and the

¹²² Markus van Wijk, Christoph Breitenmoser, and Thomas Schönholzer, “Die Führung der Armee XXI auf den Prüfstand, Erkenntnisse aus der Armee-Stabsrahmenübung STABILO 07,” *Military Power Review der Schweizer Armee*, 3/2008 (December 2008): 15-17, accessed November 6, 2015, <http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=94228>.

¹²³ Francesco Benin and Daniel Meier, “Totales Versagen der Armeeführung,” *Neue Zürcher Zeitung* (Zürich), November 3, 2013, accessed April 23, 2016, <http://www.nzz.ch/totales-versagen-der-armeefuehrung-1.18178436>.

border. Disaster relief operations occur in Switzerland or abroad. Peace support operations include the engagement of units and individuals. General operations encompass non security support (manpower, construction, transport, communications) to major civilian events such as international ski races or national cultural events and military representation duties in the event of international visits.

	Table 2. Engagement of the Swiss Armed Forces in man days (thousands)											
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Subsidiary security	282	324	340	294	423	272	190	131	122	95	122	76
Disaster relief	0.4	17	0.07	1.6	0	0.4	0.6	3.8	0.05	0.02	0	1.5
Peace support	93	98	101	100	100	96	97	97	103	103	102	106
General support	24	58	17	22	18	20	28	24	22	30	26	23
Total service days	N/A	6020	6311	6566	6367	6376	6392	6238	6311	6052	5841	5793

Source: Swiss Armed Forces, “Bilan des engagements annuels,” accessed April 10, 2016, <http://www.vtg.admin.ch/internet/vtg/fr/home/themen/einsaetze/jahres-einsatzbilanzen.html>.

Since 2004, the Swiss Armed Forces have conducted multiple subsidiary security operations. However, over 80 percent of the personnel committed to subsidiary security operations were engaged in the same operations over the 12 years: the daily protection of diplomatic representations, support of border guards, on board flight protection, and the yearly protection of the World Economic Forum. The other operations consisted of the protection of five international conferences and the 2008 European soccer championship. The daily protection of embassies has been accomplished for over ten years.

Since 2004, the Swiss Armed Forces have conducted multiple peace support operations. Over the past 12 years, more than 82 percent of the personnel committed to peace support operations were engaged in operations within Kosovo and Bosnia, which are also the only two operations with a contingent. The Swiss Armed Forces contributed individual officers and demining specialists to a dozen missions.

Career officers

In 2002, the Military Command School transformed into the Military Academy and was recognized to award bachelor's degrees. Furthermore, career officers were eligible to participate in different NATO training courses, and to continue participation in foreign professional military education. Additionally, numerous career officers participated in peace support operations. However, the dismal situation at the start of *Armee XXI* led to a drastic increase in resignations among career officers and a decrease in hiring. Between 2004 and 2006, 68 career officers resigned (approximately 7 percent).¹²⁴

Security Policy Report 2010, 2015 and *Weiterentwicklung der Armee*

Before publishing the 2010 SPR, the Department of Defense conducted 45 hearings with political parties, military organizations, elements of civil society, the cantons, and scholars.¹²⁵ These hearings revealed a lack of consensus on the strategic

¹²⁴ Federal Council, *Examen des objectifs de l'armée* (February 13, 2008), 2234, accessed March 26, 2016, <https://www.admin.ch/opc/fr/federal-gazette/2008/2193.pdf>.

¹²⁵ Daniel Möckli, "Umstrittene Schweizer Sicherheitspolitik." Dokumentation der Hearings zum Bericht 2010. *Zürcher Beiträge zur Sicherheitspolitik*, Nr. 81, (2010):

direction Switzerland needed.¹²⁶ Switzerland presented three major strategic trends: the autonomists, the cooperationists and the reductionists.

The autonomist trend is composed mainly of politicians from the national-conservative Swiss People's Party, supported by several, mainly retired, militia and career protagonists of *Armee 61*. The autonomists perceive strategic threats to the country and push for a strategy of strict armed neutrality. For autonomists, Switzerland can participate neither in PfP nor EU security programs. Their concept of the Armed Forces is a manpower heavy, defense oriented force, which can rapidly mobilize and apply the doctrine of Dynamic Defense. Their vision of Switzerland's contribution to international conflict resolution is hosting international conferences and providing individual specialists.

The cooperationist trend is mainly composed of politicians from the Liberal and Christian Democratic Party, and some socialists, supported by security policy scholars. The cooperationists perceive strategic threats to the country; however, they are convinced that only international cooperation can provide an appropriate response. They call for a broad international contribution to conflict resolution. Their concept of the Armed Forces is a crisis response force with modern capabilities, which can rapidly and actively contribute to international crisis resolution with highly capable units. European compatible defensive capabilities should be maintained.

The reductionist trend is mainly composed of politicians from the Socialist Party and some liberals and Christian-democrats, supported by pacifists and abolitionists. The

10, accessed April 14, 2016, <http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/ZB-81.pdf>.

¹²⁶ Idem., 11.

reductionists do not perceive strategic threats to the country that need to be solved by military means. They call for an Armed Forces reduction to a small volunteer force only in support of UN led missions. They do not support PfP and are undecided about EU security cooperation.

A large number of participants of the hearings were critical of *Raumsicherung* [area security]. The only elements which received overwhelming support were the militia system and neutrality. This lack of political consensus had an immense impact on the wording of the 2010 SPR, which presented the lowest common denominator.

In June 2010, the Federal Council published the SPR. The 1999 SPR had been groundbreaking because it toppled the mainstays of Cold War Switzerland, strict neutrality and conventional deterrence, and proposed the strategy of security through cooperation. The 2010 SPR was much more focused on internal problems and had more pragmatic goals for strategy: target actual and upcoming threats, achieve a large political consensus, and be financially sustainable.¹²⁷

The 2010 SPR enlarged the notion of security policy to threats against individuals and prioritized subsidiary operations in support of the cantons. However, the term *Raumsicherung* [area security] disappeared due to the misgivings of the cantons. The analysis of the operational environment underlined the acceleration of changes, the increase in the use of violence, the limitations of Western Forces in Iraq and Afghanistan, the increased field of action of NGOs, and the vulnerability of modern societies. The 2010 SPR listed threats and dangers, emphasizing the possibility of terrorist groups using

¹²⁷ Federal Council, *Rapport sur la politique de sécurité de la Suisse* (2010), 23.

weapons previously only used by the Armed Forces of states, the consequences of failed states, and the increase in threats in cyberspace.¹²⁸

Strategy was defined as follows: “Establish a national security network, by the means of an efficient and effective interaction of security policy means at the federal, cantonal and local level and to cooperate with other states in order to prevent, counter and bring under control actual and upcoming threats and dangers already identifiable or emerging in the future.”¹²⁹

The 2010 SPR stated that the Armed Forces had to develop a quantitatively small, but high quality defense competence, and that within the support of civilian authorities, their tasks included the protection of the border and critical infrastructure, such as airports, railroad and road nodes, transalpine lines of communication, electricity production and distribution networks, and industry. For international operations, the 2010 SPR stated that the quantitative increase in international commitments was difficult and that international operations had to have broad domestic support. Therefore, the international priority of the Swiss Armed Forces was to provide air and ground transport.¹³⁰ The 2010 SPR called for the creation of alarm units which could mobilize at short notice and the abandonment of the reserve.¹³¹

¹²⁸ Ibid., 12.

¹²⁹ Ibid., 24.

¹³⁰ Ibid., 45.

¹³¹ Ibid., 52.

Four months later, the Federal Council published the 2010 Armed Forces Report (AFR) which initiated the next Armed Forces Reform, *Weiterentwicklung der Armee* (WEA). The 2010 AFR highlighted the effects of the priority shift to subsidiary support of civilian authorities; however, it mainly proposed solutions with regards to shortfalls in basic training, personnel, material and facilities due to financial constraints. The 2010 AFR emphasized that the Armed Forces successfully accomplished all operations since the start of *Armee XXI* reform, but did not have an updated defense doctrine and lacked integrated command systems.¹³² The 2010 AFR presented the numerous problems of the Armed Forces, including the lack of career officers and contract soldiers, and accordingly called for several corrective measures in recruitment, training, personnel, material, logistics and departmental organization. The 2010 AFR stated clearly that a reduction in defense competence was only acceptable if it did not endanger the restoration of the full defense competence.¹³³

The 2010 AFR described the five tasks of the Armed Forces: sustenance and development of an air ground defense competence, subsidiary support to civilian authorities, safeguard of aerial sovereignty, foreign humanitarian aid, and peace support operations.¹³⁴ The AFR aligned precise time and personnel requirements to these tasks.

¹³² Federal Council, *Rapport sur l'armée 2010* (October 10, 2010), 17, accessed April 11, 2016, <http://www.vbs.admin.ch/internet/vbs/fr/home/documentation/bases/verteidigung.parsys.9969.downloadList.80172.DownloadFile.tmp/armeeberichtf.pdf>.

¹³³ *Ibid.*, 50.

¹³⁴ *Ibid.*, 52.

The publication of the 2010 AFR was followed by a contentious political debate including the negative National Council vote described in the introduction of this research. The legal adaptations were finally accepted by the Federal Assembly on March 18, 2016, five years after the publication of the 2010 AFR.

The accepted organization of the Armed Forces was three commands subordinated to the Chief of the Armed Forces.¹³⁵ First, the Operations Command included Military Intelligence, the Army, which encompassed the Special Forces and three mechanized brigade, four territorial divisions, Military Police, the Air Force which encompassed operational and training units, and the International Command. Second, the Training Command included the Armed Forces College, five training brigades, and the Armed Forces Personnel Command. Third, the Support Command included the Armed Forces Logistics Organization encompassing the logistics brigade and the Medical Command, and the Armed Forces Command Support Organization encompassing the command and support brigade.

The size of the Armed Forces was reduced to 100,000 and the reserve was abandoned, which implied the dissolution of 52 reserve and 20 active battalions. Basic training was reduced from 21 to 18 weeks.

In October 2015, the Swiss Federal Council presented the draft 2016 SPR. As required in the 2010 SPR and for the first time, a security policy report was not directly tied to an upcoming Armed Forces reform. The 2016 SPR mentioned developments since

¹³⁵ Federal Assembly, *Ordonnance de l'Assemblée fédérale sur l'organisation de l'armée* (March 18, 2016), 1-2, accessed, April 25, 2016, <http://www.vbs.admin.ch/internet/vbs/fr/home/themen/defence/wea/dokumente.parsys.82505.downloadList.90840.DownloadFile.tmp/textepourlevotefinal5nsf.pdf>.

2010 including the Fukushima catastrophe, the revelations on the NSA activities, the Ukrainian crisis, Arab Spring, the Syrian conflict and the apparition of the Islamic State; however, the report continued by stating that it would be wrong to conclude that everything had changed.¹³⁶

The draft 2016 SPR analyzed major trends such as the passage to multipolar world, the relationships between Europe, USA and Russia, economic and technological development, particularly in space, intensification of migratory movements, the importance of megapoles, regional crisis (Middle East, Ukraine, Sahel, Yemen), piracy, Islamic fighters of European origin and the Iranian nuclear program. The draft 2016 SPR proposed a broader understanding of armed conflict, extending it to the confrontation of non-state armed groups. The Armed Forces could be engaged in defense if a non-state adversary threatened territorial integrity, the population or the capability of the government over a longer period of time in a broad area, with means which could only be countered by military power.¹³⁷ The draft 2016 SPR highlighted the creation of the inter-cantonal police headquarters and the Swiss Security Network, however restated the Federal Council's refusal to establish a permanent crisis reaction staff at the federal level.

¹³⁶ Federal Council, *Rapport du Conseil fédéral sur la politique de sécurité de la Suisse* (October 26, 2015), 3, accessed November 11, 2015, <http://www.vbs.admin.ch/internet/vbs/fr/home/themen/security/sipol-berichte/sipol15/dokumente.parsys.17181.downloadList.72118.DownloadFile.tmp/20151026sipolbentwurff.pdf>.

¹³⁷ *Ibid.*, 70.

Doctrinal debate

During the Cold War, there was a common understanding of doctrine, while doctrinal debates were limited.¹³⁸ The General Staff produced comprehensive regulations for *Armee 95* which described the concept of Dynamic Defense within the Total Defense framework based on the experiences of the Cold War. This evolution did not spur major debate. Up to that date, doctrine represented in writing the dominant thought.¹³⁹ However, *Armee XXI* regulations included theoretical foundations that were subject to interpretation and the analysis of conflicts.¹⁴⁰ Furthermore, the regulation *Operative Führung XXI* introduced two new fundamental ideas, the deep-close-rear area concept for defense operations and wide area security. Modern conflicts and the implementation challenges of *Armee XXI* spurred a debate on the utilization of military power among Armed Forces leadership.

In 2008, Colonel Alex Reber, training commander of the Army training center, presented *Raumsicherung* [area security] as the new defense.¹⁴¹ The same year, Colonel Alain Vuitel, chief of military doctrine, presented *Raumsicherung* [area security] as the

¹³⁸ Braun and Fuhrer, *Military Power Review*, 2/2013: 22.

¹³⁹ Hans Wegmueller, “Gedanken zur Doktrinschöpfung Teil 2” *Allgemeine schweizerische Militärzeitschrift*, 4 (April 1998): 9, accessed January 2, 2016, <http://retro.seals.ch/digbib/view2?pid=asm-004:1998:164::226>

¹⁴⁰ Christian Bühlmann, “Die Führungsreglemente XXI und das operative Denken: militärische Doktrin, Theorie und Praxis,” *Allgemeine schweizerische Militärzeitschrift*, 3 (March 2015): 5, accessed February 15, 2016, <http://retro.seals.ch/cntmng?pid=asm-004:2005:171::1006>.

¹⁴¹ Reber, *Allgemeine schweizerische Militärzeitschrift*, 4 (2008): 19.

response to strategic threats, not necessarily involving a state military.¹⁴² In spite of the disappearance of the term *Raumsicherung* [area security] from the 2010 SPR, the challenge of the non-state hybrid threat remained.

In 2010, Brigadier General Daniel Lättsch, director of the Military Academy called for a new doctrine in response to the hybrid threat. This new doctrine called for a unified joint approach of all military means and for the utilization of doctrine as the starting point for the next reform.¹⁴³ In 2012, Brigadier General Lättsch condemned the dogmatic answer of the 2010 AFR in response to hybrid threats.¹⁴⁴

In 2013, several doctrine writers stated that the comprehensive doctrine was in the final stage of writing and presented the essential tenets of their thought.¹⁴⁵ The authors presented several important points concerning cooperation with all security actors, the importance of mission command and information integration. However, the article lacked

¹⁴² Alain Vuitel, “Sûreté sectorielle – une réponse à des défis sécuritaires complexes,” *Military Power Review der Schweizer Armee*, 2/2008 (December 2008), 29.

¹⁴³ Daniel Lättsch, Daniel Moccand, “Moderne Verteidigung,” *Military Power Review der Schweizer Armee*, 2 (Dezember 2010): 10, accessed November 7, 2015, http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.28145.DownloadFile.tmp/mpr210gesamtausgabe.pdf.

¹⁴⁴ Daniel Lättsch, “Innere Sicherheit und Armee,” *Military Power Review der Schweizer Armee*, 2/2012 (December 2012): 20, accessed November 6, 2015, http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.7179.DownloadFile.tmp/mpr212web.pdf.

¹⁴⁵ Curtenaz, Sylvain, Laurent Currit, Christian Lanz, David Rieder, and Christoph Abegglen. “Doctrine de l’Armée : état des travaux et perspectives,” *Military Power Review der Schweizer Armee*, 1/2013 (May 2013): 27-38, accessed November 6, 2015, http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.24380.DownloadFile.tmp/mpr113web.pdf.

common denominators across the range of military operations and only repeated the constraints of the 2010 AFR concerning peace support operations and support to civilian authorities. The authors presented the doctrine of Zone Defense for defensive operations, which was a miniaturized version of the Dynamic Defense doctrine. Their postulate lacked proposals to achieve unified action¹⁴⁶ in order to answer the challenges regarding the build-up and facing a hybrid threat.

In 2013, Lieutenant General Dominique Andrey, chief of the Army, presented his reflections on the use of land power. He proposed the utilization of land power centered on the protection of critical infrastructure, and combining defensive and offensive operations in an environment presenting a threat continuum.¹⁴⁷ In 2014, six months after the popular vote on the *Gripen*, Lieutenant General Aldo Schellenberg, chief of the Air Force, presented his vision on the development of the Air Force, particularly with regards to required acquisitions over the next ten years. The necessity for major acquisitions such as a multi-role aircraft, a protected radar-system and a long-range air defense missile system are based on the defensive task of the Armed Forces.¹⁴⁸ The same year, Christoph

¹⁴⁶ Department of Defense, JP 1, *Doctrine for the Armed Forces of the United States*, II-8.

¹⁴⁷ Dominique Andrey, « Quelques considérations sur l'emploi de nos forces terrestres, » *Military Power Review der Schweizer Armee*, 2/2013 (Dezember 2013): 5-17, accessed November 7, 2015, http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.27059.DownloadFile.tmp/mpr213.pdf.

¹⁴⁸ Aldo C. Schellenberg, "Grundlagen für die langfristige Entwicklung der Luftwaffe," *Military Power Review der Schweizer Armee*, 2/2014 (December 2014), 6-17, accessed November 6, 2015, http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.37117.DownloadFile.tmp/mpr115.pdf.

Abegglen, General Staff Colonel and doctrine writer questioned the intellectual fundamentals of the proposed Zone Defense, because it limited the strategic options of the country.¹⁴⁹ In 2015, Brigadier General Laurent Michaud, chief of staff of the Joint Staff, underlined the necessity to develop joint integration mechanisms, however limiting this argument to Special Forces.¹⁵⁰ After having reviewed the practical aspects of Swiss Armed Forces reform, the author will review literature pertinent to military innovation because successful reform strives on innovation.

Military innovation

Many authors have contributed to the theme of military innovation because the military institution that implements new ideas first has a significant advantage in the next conflict or crisis. The study of military innovation is pertinent to this research because it pertains to how the military institution as a whole reacts to changes of the relevant factors in its environment to produce the adequate capabilities.

In his 1973 seminal lecture, Howard sketched certain essential challenges for military institutions in a time of peace. These deductions are applicable for Switzerland, a country which has not been subject to armed conflict for almost two hundred years. He

¹⁴⁹ Christoph Abegglen, “Von der Strategischen Klammer,” *Military Power Review der Schweizer Armee*, 2/2014 (December 2014), 19-27, accessed November 6, 2015, http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.37117.DownloadFile.tmp/mpr115.pdf.

¹⁵⁰ Laurent Michaud, “Quelques considérations sur la conduite opérative et l’emploi des forces spéciales,” *Military Power Review der Schweizer Armee*, 1/2015 (May 2015), 40, accessed November 6, 2015, http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.37117.DownloadFile.tmp/mpr115.pdf.

highlighted the difficulties of working in an indifferent or even hostile social environment and of working in a void, because new ideas cannot be confronted to reality.¹⁵¹ He then described military science, which doctrine can be considered a part of, as a triangular dialogue “between three elements in the military bureaucracy: operational requirement, technological feasibility and financial capability.”¹⁵² The dialogue is marked by the necessity for rigorous thinking, the traditionalism of the military institution, the increasing complexity of warfare and density of bureaucracy, which leads to the difficulty to innovate. Howard contends that most belligerents will enter war with the wrong doctrine and therefore, “the advantage goes to the side which can most quickly adjust itself.”¹⁵³

Posen used organizational theory, which explains the behavior of large bureaucracies, and balance of power theory, which explains the behavior of states, to analyze doctrinal development in France, the United Kingdom and Germany during the interwar period. He deduced that, although military doctrine is mostly affected by the state's international position, “in times of relative international calm, organizational dynamics are allowed to flourish.”¹⁵⁴ He presented doctrine as the reflection of the “appraisals of military technology, national geography, adversary capabilities, and the

¹⁵¹ Michael Howard, “Military Science in an Age of Peace,” *RUSI Quarterly* 119 (March 1974): 4.

¹⁵² *Ibid.*, 5.

¹⁵³ *Ibid.*, 6.

¹⁵⁴ Posen, *The Sources of Military Doctrine*, 40.

skills of one's military organization”¹⁵⁵ by professional military officers. He also emphasized the importance of a successful political-military integration, using the example of France in the late 1860s as a negative example. The French military were unable to correct the deficiencies in officer training, personnel availability and mobilization before the conflict with Prussia in 1870. The French inability to adapt in peacetime to the new methods of war preceded a crushing defeat.¹⁵⁶

Posen also stressed that political or diplomatic decisions take less time than implementing doctrinal change.¹⁵⁷ Doctrinal change takes time because large organizations establish complicated procedures and structures to counter uncertainty. The organization sought to free itself from formal political authority, by concealing its art from civilian authorities, in order to protect internal balance and routine from the uncertainty of political decisions. This fact is strengthened by the people within the organization with personal stakes in these procedures and structures and who “have little interest in change.”¹⁵⁸ Posen continued by looking at three handicaps to political-military integration.¹⁵⁹ First, military organizations will not make heavy adjustments to adapt to the requirements of state policy. Second, doctrinal information will be withheld from political authorities. Finally, military organizations are unable to set priorities among

¹⁵⁵ Ibid., 14.

¹⁵⁶ Ibid., 27.

¹⁵⁷ Ibid., 30.

¹⁵⁸ Ibid., 46.

¹⁵⁹ Ibid., 53.

their sub-organizations and will arrange a “negotiated environment”.¹⁶⁰ Posen concluded that civilian leaders are essential in the control of the military through the “careful audit of military doctrine.”¹⁶¹

Rosen used 21 examples to research peacetime, wartime and technological innovation in *Winning the Next War*. The conclusions for the four peacetime cases are the most relevant for this research. For Rosen, very much like Posen, the “problem of military innovation was necessarily a problem of bureaucratic innovation,”¹⁶² because the military institution, as a large bureaucracy, resisted change. However, he included a further challenge to the peacetime military organization. To the contrary of other organizations, the military can only introduce new personnel from below and their development will be canalized by senior leadership.¹⁶³ Rosen argued that civilian intervention is not a sufficient motor for military innovation in peacetime.¹⁶⁴ He stated that military organizations have to be analyzed as a hierarchical political entity. In such organizations, only senior leadership can implement new ideas because they have the necessary power, either by enforcing adaptation or promoting agents of change. The promotion of young officers embracing new ideas was the major agent of successful

¹⁶⁰ Ibid., 226.

¹⁶¹ Ibid., 241.

¹⁶² Stephen Peter Rosen, *Winning the Next War—Innovation and the Modern Military* (London: Cornell University Press 1994), 2.

¹⁶³ Ibid., 8.

¹⁶⁴ Ibid., 18.

innovation.¹⁶⁵ Moreover, Rosen stressed that innovation is “very different than the search of military efficiency.”¹⁶⁶

Avant added the view point of the institutional theory, which defined that responses of different actors are determined by the benefit to their political interests.¹⁶⁷ Her analysis was based on peripheral wars conducted by United Kingdom and the USA, wars that did not endanger the existence of the state itself. In these conflicts, politicians are tied to domestic political considerations. This relates to Switzerland's actual situation, without any existing major threat to the nation. Avant stated that the structure of civilian institutions, which affects the civilian control on bureaucracy, was a crucial factor to the development of the military organization's culture.¹⁶⁸ She concluded that divided civilian institutions hindered change in military organization¹⁶⁹ and that civilian “leaders cannot be dependent upon to act in the national interest if the action threatens their domestic power base.”¹⁷⁰

Millet linked innovation during the interwar period, which included the development of novel doctrines in mechanized and naval warfare, to technology, strategic

¹⁶⁵ Ibid., 20.

¹⁶⁶ Ibid., 257.

¹⁶⁷ Avant, *Political Institutions and Military Change*, 9.

¹⁶⁸ Ibid., 15.

¹⁶⁹ Ibid., 130.

¹⁷⁰ Ibid., 134.

context and the political behavior of military organizations.¹⁷¹ However, he also underlined that most technologies had already been utilized in World War I, so intellectual concepts could be established upon existing experiences.¹⁷² Millet, similarly to Posen and Rosen, recognized the need to overcome organizational inertia. He stated that successful implementation of innovation is linked to innovative presence in the military education system, appropriate doctrine, and operational units which could apply the new principles.¹⁷³ He underlined the importance of published doctrine to encourage debate among officers. For Millet, civil-military integration was also a critical ingredient to successful innovation.¹⁷⁴

Watts and Murray explained the German victory in 1940 on the utilization of sound doctrinal principles developed during the interwar period as well as the creation of structures which enabled the effective use of these principles.¹⁷⁵ The German leaders had not aimed to create a new way of fighting, but to build coherently on the lessons of World War I.¹⁷⁶ For Watts and Murray, successful military innovation was enhanced by senior

¹⁷¹ Allan R. Millett, "Patterns of Military Innovation," in *Military Innovation in the Interwar Period*, ed. Williamson Murray and Allan R. Millett (New York, NY: Cambridge University Press, 2009), 335.

¹⁷² *Ibid.*, 331.

¹⁷³ *Ibid.*, 349.

¹⁷⁴ *Ibid.*, 359.

¹⁷⁵ Williamson Murray and Barry Watts, "Military Innovation in Peacetime," in *Military Innovation in the Interwar Period*, ed. Williamson Murray and Allan R. Millett (New York, NY: Cambridge University Press, 2009), 373.

¹⁷⁶ *Ibid.*, 379.

leadership developing a vision embodied in operational realities, pushing for bureaucratic acceptance, and transforming visions into realities, including doctrine and organizations.¹⁷⁷

Nielsen underlined the importance of civilian guidance and the role of US Army's Training and Doctrine Command (TRADOC) in her description of the post-Vietnam transformation of the US Army, a major period of innovation.¹⁷⁸ TRADOC was able to craft and implement the reform program. However, Nielsen also presented certain possible critical developments during this period. The US Army's doctrine had not integrated the lessons of Vietnam, was concentrated on Europe, and had limited itself to the operational level of war.¹⁷⁹ The same risks of forgetting past lessons, following political views and narrowly focusing on military challenges exist today for Swiss doctrine writers.

For the author, the strategic environment, the threat, finances, civilian intervention, political organization and bureaucratic mechanisms are the factors influencing the development of doctrine. The intellectual act of creating doctrine, which requires the rigorous thinking suggested by Howard, is innovation. However, established doctrine can become part of the conservatism of the military institution. So the innovative capabilities of the military organization affect the development and implementation of

¹⁷⁷ Ibid., 406-410.

¹⁷⁸ Suzanne C. Nielsen, *An Army Transformed: The U.S. Army's Post-Vietnam Recovery and the Dynamics of Change in Military Organizations* (Carlisle, PA: Strategic Studies Institute, 2010), 46.

¹⁷⁹ Ibid., 46-48.

doctrine. This study will not compare the different factors leading to coherent doctrine, but use them to build an understanding of Switzerland's military doctrine.

The capabilities based assessment and
the DOTMLPF-P framework

The US Army correctly considers itself as the most powerful army in the world; however, Mark A. Milley, Chief of the Staff of the Army, recognized the necessity for his organization to change and adapt to the complexities of the world.¹⁸⁰ The US Army War College senior reference handbook *How the Army Runs* and the Chairman of the Joint Chiefs of Staff instructions provide insight on the adaptation process.

Three documents provide strategic direction for the development of the Armed Forces: the National Security Strategy, the Defense strategy review, and the National Military Strategy.¹⁸¹ Furthermore the CJCS “conducts both deliberate and continuous assessments,”¹⁸² which reviews strategic capabilities, with friendly and threat capabilities.

Based on strategic direction, the Army generates requirements for the future operating environment, which “describes the physical, demographic, political, economic,

¹⁸⁰ Mark A. Milley, “Winning matters, especially in a complex world,” *Army* (October 2015): 26, accessed March 16, 2016, <http://www.ansa.org/publications/digital/Documents/greenbook2015/index.html>.

¹⁸¹ Rich Meinhardt and Martha Stewart, “Chapter 2 Strategy,” in *2015–2016 How the Army Runs, A Senior Leader Reference Handbook*, ed. by Louis Yuengert (Carlisle: U.S. Army War College, 2015), 2-3.

¹⁸² Chairman of the Joint Chiefs of Staff, CJCSI 3100.01C *Joint Strategic Planning System* (Washington, DC: Joint Chiefs of Staff, November 20, 2015), A-2, accessed March 16, 2016, http://dtic.mil/cjcs_directives/cdata/unlimit/3100_01a.pdf.

technological, and military conditions in which the Army will operate during the next two decades.”¹⁸³ These requirements are formulated into concepts: the Army Capstone Concept, the Army Operating Concept and the Army Functional Concepts, which will provide the Force Operating Capabilities. These concepts enable the Capabilities-Based Assessment (CBA). This process has three steps: first the functional area analysis (what is necessary for the mission), second, the functional needs analysis finds the gaps and risks, and finally the functional solution analysis proposes DOTMLPF-P solutions.¹⁸⁴

The DOTMLPF-P framework used by the US Armed Forces allows a holistic and integrated analysis. CJCS instruction 3010.02D describes the different domains of the framework.¹⁸⁵ Doctrine is composed of principles that guide the employment of the force and is based on experiences of operations, training and exercises. Organization relates to how the force is organized to accomplish the mission. Training relates to individual, staff and collective training. Material includes all weapons, vehicles and equipment that has to be acquired. Leadership and education relates to learning, objectives, procedures and standards. Personnel are the required military or civilian individuals to accomplish the mission. Facilities relate to command and industrial infrastructure. Policy are constraints related to tasks, capabilities and roles. The process is effective and can be used as benchmark for the Swiss Armed Forces because it enables an iteration between the

¹⁸³ Edward J. Filiberti and Jerome F. Kelly, “Chapter 3 Force Management,” in *2015–2016 How the Army Runs, A Senior Leader Reference Handbook*, ed. by Louis Yuengert (Carlisle: U.S. Army War College, 2015), 3-10.

¹⁸⁴ *Ibid.*, 3.12-3.15.

¹⁸⁵ Chairman of the Joint Chiefs of Staff, *Guidance for the Development and Implementation of Joint Concepts*, A3-A5.

operational environment, the tasks and the operational capabilities, which are articulated in the DOTMLPF-P framework.

Summary and conclusions

The review of the evolution of the Swiss Armed Forces from the Cold War until 2016, has allowed the author to present the main elements as presented in Table 3, of the three different organizations of the Armed Forces (*Armee 61*, *Armee 95*, *Armee XXI*) and the next planned reform, *WEA*.

Table 3. Evolution of the Swiss Armed Forces				
Security policy reports	1973 SPR	1990 SPR	1999 SPR	2010 SPR
Armed Forces plan	1975 Master plan	1992 Master plan	2001 Master plan	Armed Forces Report 2010
Armed Forces designation	<i>Armee 61</i>	<i>Armee 95</i>	<i>Armee XXI</i>	<i>WEA</i>
Implementation	Continuous	1995	2004	2018 (plan)
Concept	Total Defense	Total Defense	Security through cooperation	Security through cooperation
Defensive doctrine	Combined Defense	Dynamic Defense	Close-Deep-Rear	Zone Defense

Source: Created by author.

The Federal council often imposes policy and personnel constraints on the Swiss Armed Forces during the reform process because service time of the militia soldier is at the core of the militia system and it is one of the main cost factors. Personnel and policy constraints have second and third order effects on each of DOTMLPF-P domains. The

evolution of the number of militia personnel incorporated in the Armed Forces, the duration in weeks of basic training, the age until each rank serves, and the rhythm of the refresher courses and the number of days served by militia personnel in a year is illustrated in the table 4.

Table 4. Militia personnel evolution in the Swiss Armed Forces				
	<i>Armee 61</i>	<i>Armee 95</i>	<i>Armee XXI</i>	<i>WEA</i>
	1961 – 1994	1995 – 2003	Since 2004	Planned 2018
Militia personnel	625,000	400,000	200,000	100,000
Length of basic training	17 weeks	15 weeks	21 weeks	18 weeks
Age of service for				
– Soldiers	– 50	– 42	– 34	– 34
– Lieutenants	– 55	– 42	– 36	– 40
– Captains	– 55	– 42/52	– 42	– 42
– Majors and above	– 55	– 52	– 50	– 50
Refresher courses	Annual	Biennial	Annual	Annual
Days of militia service per year (Approximation)	10,000,000	6,250,000	6,000,000	5,000,000 (planned)

Source: Created by author.

Service time of militia personnel is germane to three fields. First, the number of militia service days per year is directly linked to Armed Forces costs. Each service day results in lodging, food, wage, income compensation allowance, ammunition, medical, fuel and maintenance costs. Second, the number of days in a given year and the number of years militia personnel have to serve have an impact on their life and income and create costs for their employer, due to their absence. Third, service time is relevant to the

fulfillment of the constitutional requirement, of applying the militia system.¹⁸⁶ The number of troops in the Swiss Armed Forces are decreased by reducing the age of service, each year group being the equivalent of 20,000 soldiers. The reason not to choose selective service, where only a portion of potential recruits serve, is to ensure the principle of *Wehrgerechtigkeit* [the equality regarding military service]. Generally, the Federal Council pushes to reduce the number of service days because of societal individualization and budget constraints.

The passage from the conventional deterrence of *Armee 61* and *Armee 95* to the strategy of security through cooperation during a period of major transformation in the operational environment was necessarily a period of innovation for the Swiss Armed Forces. The purpose of this study is to evaluate the state of Switzerland's military doctrine and organizations after more than 20 years of reform, understand the causes of any deficiencies, and propose recommendations to amend the situation. The review of literature pertaining to military innovation enables the author in the next chapter to construct a model in order to nest doctrine in all relevant sources of change.

¹⁸⁶ Federal Constitution of the Swiss Confederation, April 18, 1999 (status as of 14 June 2015), accessed November 11, 2015, <https://www.admin.ch/opc/en/classified-compilation/19995395/201506140000/101.pdf>, article 58.

CHAPTER 3

RESEARCH METHODOLOGY

The objective of this chapter is to present the methodology in order to answer the primary research question: What doctrinal and organizational changes are required of the Swiss Armed Forces in order to fulfil their strategic tasks? An analytical model, based on theoretical literature, framed the analytical process. The model is illustrated at Figure 4 and depicted the environment in which doctrine evolved.

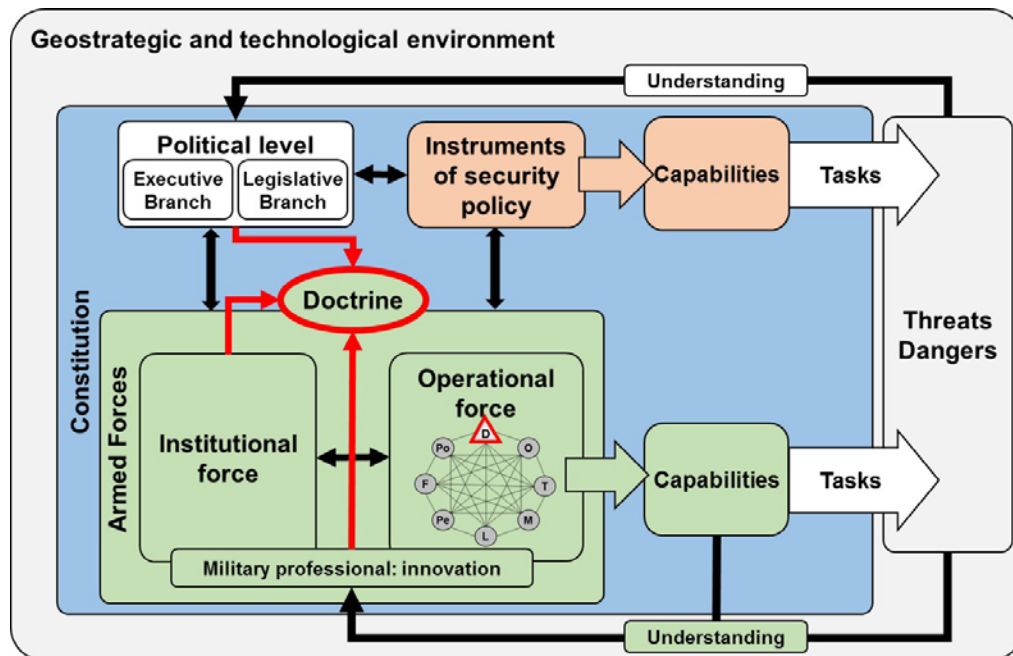


Figure 4. Analytical model

Source: Created by author.

The author defined doctrine as an intellectual construct describing the use of military power to achieve strategic goals. Doctrine is created by the institutional force,

within the constitutional framework and is guided by the government's strategy. Sound doctrine contributes to shared understanding within the military institution as well as between the Armed Forces and the political level. Threats and dangers are present in the geostrategic and technological environment of any given country.

Within the normative framework of the constitution, the political level assigned tasks to the instruments of security policy to prevent, counter, or eliminate these threats and dangers. The Swiss instruments of security policy were the Armed Forces, Foreign Affairs, Service of the Protection of the Population, intelligence service, economic politics, customs, police and civil service.¹⁸⁷ The political level, split in the executive and the legislative branches, affected the development of the Armed Forces and doctrine, through policy, strategy, finances, legislation and control mechanisms.

The political level interpreted the environment, threats, and dangers in order to provide strategic guidance, proper funds, legislation and personnel to the instruments of security policy which will, in turn, develop capabilities to accomplish the assigned tasks. Furthermore, the political level continued to affect doctrine through legal and constitutional mechanisms, such as hearings or parliamentary interpellations.

The Armed Forces were separated into the institutional force, or bureaucracy, and the operational force. The institutional force created a doctrine synchronized with the other DOTMLPF-P domains in order to develop operational force capabilities which fulfill the assigned tasks. Doctrine was also fundamental to the institutional force for creating shared understanding and justifying expenditures and organizations. Innovation

¹⁸⁷ Federal Council, *Rapport sur la politique de sécurité de la Suisse* (2015), 62.

was an attribute of the military professionals across the Armed Forces and was driven by the novel understanding of the geostrategic and technological environment, and experience stemming from the use of the capabilities in operations or exercises. Accordingly, three actors affected decisively the development of doctrine: the political level, the institutional force and the military professional.

The DOTMLPF-P framework is an efficient tool to solve gaps between the tasks and the capabilities of the operational force,¹⁸⁸ provided that the actions of the political level, the institutional, and military professionals are rationally guided. However, as discussed previously several barriers can hinder the actions of the relevant actors.

First, in the absence of a clear threat, the members of the political level possibly define strategic guidance as a result of domestic political considerations. The actions of the political level can also be hampered by ill-defined mechanisms. Second, the institutional force can inhibit required innovation in order to protect internal balance and avoid heavy adjustments. The quest for bureaucratic efficiency can also be mistaken for innovation. The institutional force can block innovation, through defining inadequate priorities, blocking the promotion of innovative officers and hampering the creation of coherent doctrine. The institutional force might also morph into an organizational actor competing for the available funds against other instruments of security policy. Third, military professionals may lack the appropriate attributes to innovate because of shortfalls in operational experience and education.

¹⁸⁸ Greg Hamlett and Robert Hume, “Chapter 10 Capability Requirements and Materiel System Research, Development, and Acquisition Management,” in *2015–2016 How the Army Runs, A Senior Leader Reference Handbook*, ed. Louis Yuengert (Carlisle: U.S. Army War College, 2015), 10-2.

Accordingly, major doctrinal change implies effects across the DOTMLPF-P framework and without an immediate threat, strong political pressure, and determined military leadership, the institutional force will resist this change. In this context, strategic documents are an essential component of doctrinal development; however, they are political and therefore imperfect documents. The author conducted the analysis in eight steps using the analytical model as a framework. First, four strategic tasks were extrapolated from the constitution and related to threat and time. The author used the constitution instead of the SPR or the AFR, under the premise that these documents were biased by the political level and the institutional force. Second, a capabilities based assessment of the four strategic tasks and the proposed capabilities of the latest Swiss Armed Forces reform, *WEA*, was conducted in order to identify possible gaps. Third, the author verified the presupposition that the origin of these gaps are historical, through an analysis of the doctrinal and organizational evolution of the Swiss Armed Forces since the end of the Cold War. Fourth, the factors which drove the institutional force during the reforms were identified. Fifth, the trends marking the evolution of political-military mechanisms were presented because of the possible effects of the political level on doctrine. Sixth, relevant lessons from operations and major exercises for the development of doctrine and organizations were presented because these experiences affect military professionals. Seventh, the author identified constraints in Swiss strategic documents, which are caused by domestic issues or military institutional resistance to change. Finally the barriers to doctrinal change in the Swiss Armed Forces will be identified.

CHAPTER 4

ANALYSIS

Introduction

Europe has undergone sweeping societal, political and security changes in the last 25 years. The threat has morphed from the nuclear and conventional forces of the Warsaw Pact into potential hybrid threats evolving in a complex and rapidly changing environment. During this period Switzerland never confronted an existential and imminent threat; however, the Swiss government attempted a radical strategy change. In the political and economic fields, the Federal Council pursued European integration. In the security field, the strategic concept security by cooperation replaced conventional military deterrence. These decisions were answered by the emergence of a strong national-conservative movement in the country, marked by the progression of the Swiss People's Party and several popular votes slowing European integration. Since 1989, the Swiss Armed Forces have been through two major reforms and are preparing for a third in a context of decreasing manpower, allotted training time, and funding.

The purpose of this study is to evaluate the state of Switzerland's military doctrine and organizations after more than 20 years of reform, understand the causes of any deficiencies, and propose recommendations to amend the situation. In this chapter, the author will answer the secondary research questions:

1. What are the Swiss Armed Forces strategic tasks extrapolated from the constitution and expressed in relationship to threat and time?
2. What are the gaps between the strategic tasks and the WEA capabilities?

3. How have the Swiss Armed Forces doctrine and organization evolved since the end of the Cold War?
4. What were the main causes of doctrinal change in the Swiss Armed Forces since 1989?
5. Which lessons from operations and major exercises are relevant for the development of doctrine and organizations?
6. Which constraints in Swiss strategic documents are caused by domestic political issues or military institutional resistance to change?
7. What are the barriers to doctrinal evolution in the Swiss Armed Forces?

With the answers to these secondary questions, the author will have set the conditions to answer the primary research question: What doctrinal and organizational changes are required of the Swiss Armed Forces in order to fulfil their strategic tasks?

Strategic tasks

The tasks of the Armed Forces are described in article 58 of the constitution: “The Armed Forces serve to prevent war and to maintain peace; they defend the country and its population. They shall support the civilian authorities in safeguarding the country against serious threats to internal security and in dealing with exceptional situations. Further duties may be provided for by law.”¹⁸⁹ The interpretation and the prioritization of these tasks has been subject to debate. The main points of contention were the quality and quantity of troops necessary to maintain defense competence, the utilization of military

¹⁸⁹ Federal Constitution of the Swiss Confederation, April 18, 1999 (status as of 14 June 2015), accessed November 11, 2015, <https://www.admin.ch/opc/en/classified-compilation/19995395/201506140000/101.pdf>.

power against non-state actors within Switzerland and the necessity and scope of international peace support operations.

The constitution formulates the tasks of the Armed Forces broadly, leaving the detailed execution of these tasks to the executive authority of the government. The executive interpretation of these tasks is formulated in the 2010 AFR and the draft 2016 SPR. These documents are possibly biased by domestic political considerations and Armed Forces bureaucratic resistance to change. Therefore, it is necessary to express strategic tasks, extrapolated directly from the constitution, in relation to threat and time.

In today's environment, the threat is always a combination of regular, irregular, terrorist, and criminal threats; nevertheless the threat can be categorized in four levels: latent, elevated, non-state hybrid, and state hybrid. The latent threat is present at all times and which the instruments of security policy have to counter on a daily basis. In Switzerland, this threat, composed mainly of criminal activities, is countered by the civilian authorities consisting primarily of the police and the border guards. The normal contribution of the Armed Forces at the latent threat level is the safeguard of aerial sovereignty.

The elevated threat level is reached either by a quantitative increase in the threats present at the latent level or the apparition of increased levels of violence. At the increased threat level, the civilian security command capability can still control the situation; however, they may require quantitative (manpower) or qualitative (air, electronic, CBRN) support. For example, in Switzerland, only the Armed Forces can provide electronic reconnaissance and jamming, air transport and reconnaissance, or CBRN reconnaissance and decontamination capabilities. At the non-state hybrid threat

level, the threat overwhelms civilian security command capability, due to the quantitative or qualitative scope of violence; however, the threat is not a state, nor is it state backed. Finally, at the state hybrid level, the threat overwhelms civilian security command capability, endangers the existence of the country, and is a state or is state-backed.

By setting the four threat levels in the domestic and the international areas of operations, eight potential cases for the engagement of the Armed Forces exist. However, the engagement of the Armed Forces abroad against a state hybrid threat can be excluded, because Switzerland's historical application of neutrality forbids peace enforcement or the use of military power without a UN or an OSCE mandate.

Armed Forces domestic engagement at the latent threat level is only necessary in the case of an exceptional situation, during which there is a larger need for protection, as in the case of international conferences. Participants conduct these conferences in Switzerland not only because of the country's neutrality, but also because of the country's security. With the presence of an increased threat, it is unlikely that such conferences would be conducted in Switzerland.

The threat analysis within the context of time shows that the latent threat is always present. An elevated and hybrid non-state threat can appear rapidly within Switzerland and abroad without any previous long term indicators. Currently, Switzerland is not subject to a state hybrid threat. In order to keep all options open for political decision makers, the Swiss Armed Forces must be able to rapidly respond to situations at the latent, elevated, and non-state hybrid threat level in Switzerland and abroad.

An apparition of a state hybrid threat implies a major transformation of the European security environment, such as the dissolution of the EU or NATO, and the simultaneous transformation of one of the larger European states or group of states into a hostile state. This improbable transformation of the security environment would take years. The proper recognition of early indicators would enable the start of an Armed Forces build-up; however, the lack of a large national industrial base limits the possibilities of major weapon systems acquisition.

Considering the previous reflections on the threat and time, and based on the constitution, the four strategic tasks of the Armed Forces are:

1. Contribute capabilities, on short-notice, to maintain peace in areas with latent, elevated or non-state hybrid threats.
2. Support, on short-notice, civilian authorities in Switzerland in exceptional situations at the latent or elevated threat levels (serious threats to internal security).
3. Defend the country and its population, on short notice, against a non-state hybrid threat.
4. Prepare to defend Switzerland autonomously or in cooperation with another country against a state hybrid threat after a long term build-up of the defense without major weapon systems acquisition.

In 1989, the strategic task of the Swiss Armed Forces was to deter any potential aggressor with a strong and ready conventional force. The transition from the 1989 strategic task into the four current strategic tasks started with *Armee 95* and required an Armed Forces transformation.

In the next section the author will conduct a capabilities based assessment of the four strategic tasks and the proposed capabilities of the *WEA* Armed Forces in order to identify possible gaps.

Gaps between the strategic tasks and the *WEA* capabilities

In order to conduct the capabilities based assessment, the author will start this section by presenting the main features of the *WEA* DOTMLPF-P framework.

In the doctrinal domain, initial *WEA* doctrinal documents have been released within the organization; however, the numerous recent publications related to doctrine demonstrate an ongoing debate. A movement to recreate a sense of unity of effort exists;¹⁹⁰ however, it will be challenging to overcome organizational specificities which have developed over the years. In any case, there is no evidence that an overarching doctrinal principle, such as unified action,¹⁹¹ will be integrated. Draft documents propose *Zonenverteidigung* [Zone Defense] as a defensive doctrine, which is nothing more than a reduced version of the *dynamische Raumverteidigung* [Dynamic Defense]. There are doctrinal shortfalls in the implementation of the consequences of the abandonment of *Raumsicherung* [area security] and the subsequent integration of relevant stabilization type tasks. International operations remain separate. With the creation of the inter-cantonal police headquarters and the Swiss Security Network, elements of a coordinated

¹⁹⁰ [Armed Forces Staff], *Militärdoktrin 2017*, 6.

¹⁹¹ Department of Defense, Joint Publication (JP) 3-0, *Joint Operations* (Washington, DC: Department of Defense, August 11, 2011), I8-I9, accessed March 26, 2016, http://www.dtic.mil/doctrine/new_pubs/jp3_0.pdf.

national security architecture are emerging; however, the tenets of national civil-military cooperation are not defined.

In the organizational domain, *WEA* has the following units in the operational force: one joint headquarters (the Operations Command), four territorial divisions, three mechanized brigades, the Special Forces Command, and the Air Component Command. Infantry battalions present a specific challenge, due to the range of their possible engagements and the array of their weaponry. All infantry battalions are equipped with APCs, light mortars, light machine guns and anti-tank weapons. Infantry battalions require support of logistics and command support for longer operations. Infantry troops are not trained in crowd control. Military police battalions provide crowd control capabilities. At all times, a reduced single service infantry battalion, composed of two infantry companies can be engaged. However, this battalion has reduced staff, headquarters, and logistical capabilities. Air Force, Special Forces and CBRN troops maintain elements at higher readiness levels. The head of the Armed Forces College assumes the function of the COSOT. The International Command remains the sole command for recruiting, training and engaging units and individuals in international operations.

In the training domain, soldiers will retain high readiness for individual skills (personal weapon, communication, and first-aid). Special Forces units and Air Force flying units will retain high readiness. Ground units will regularly train at the battalion level during their refresher courses and the mechanized brigades and territorial divisions train every second or third year in major exercises. The extent of training which the

Operations Command can achieve, depends on the quantity and quality of daily assumed institutional and operational tasks.

In the material domain, the Swiss Armed Forces have sufficient and up-to-date tanks, infantry fighting vehicles, infantry weapons, EW systems, CBRN material, fighter aircraft, transport helicopters, unmanned aerial systems, brigade level fire support, short range air defense systems, and engineering systems. The ongoing acquisition of 12 cm mortars and anti-tank systems will compensate the shortfalls in these fields. Nevertheless, the Swiss Armed Forces lack an adequate command and control system and completely lack middle and long range air defense, air to ground capabilities, long range fires, and reconnaissance and targeting systems.

In the leadership and education domain, the Swiss Armed Forces will maintain quality tactical and academy level education; however, there is a shortfall in operational, joint and military strategic education. In the personnel domain, the Swiss Armed Forces plan to maintain the current recruiting and salary system. Consequentially, an increase in the number of career officers and single-service soldiers is improbable. In the facilities domain, the Swiss Armed Forces have the necessary training and headquarters facilities. All fortresses and most man-made obstacles have been abandoned. In the policy domain, neutrality and militia are intangible principles.

The first strategic task is to contribute capabilities on short-notice to maintain peace in areas with latent, elevated or non-state hybrid threats. The goal stated since the 1999 SPR and repeated in the 2010 SPR is to provide 500 personnel for international operations. This goal has never been achieved with the system of a separate International Command, which recruits and trains personnel and forms units once a mission is

accepted. Even if a mission is accepted, Switzerland cannot guarantee international partners that the country will find the necessary volunteers. The gap for the first strategic task is in the doctrinal, organization and personnel domains. There is an insufficient quantity of trained personnel available to conduct international operations. No active unit can deploy to international missions. The International Command does not utilize the same doctrinal principles as the rest of the Armed Forces.

The second strategic task is to support on short-notice, civilian authorities in Switzerland in exceptional situations at the latent or elevated threat levels. The capability WEA provides for this requirement is 500 soldiers within 48 hours, 3,000 soldiers within four days and 35,000 soldiers within three weeks. Units and personnel are provided by all joint partners, according to the operational requirements; however, the core competency of ground protection is provided by infantry units. The Swiss Armed Forces have regularly accomplished this type of operation at a latent threat level and can adequately provide the required personnel, material and training capabilities. However in the planned configuration, this type of operation strains organizations. The Operations Command is involved because joint coordination is necessary. The concerned territorial division is involved because it coordinates with cantonal police and requires combined arms coordination. Logistical and command support coordination is required because infantry battalions are not autonomous in these domains. The resources in time and personnel utilized for the coordination of such operations by the Operations Command are not available for training complex operations. The gap for the second strategic task is in the organization domain, because there is no other organization which can take over joint

coordination from the Operations Command and there is no combined arms task force battalion level headquarters.

The third strategic task is to defend the country and its population on short notice against a non-state hybrid threat. In this case the Swiss Armed Forces could use the entire operational force to counter this threat; however, as demonstrated by the failures of the *Stabilo Due* exercise, the command of such operations is challenging. The gap for the third strategic task is in the organization, training, personnel and doctrinal domains. The Swiss Armed Forces lack a joint level organization to conduct offensive tasks against a hybrid threat across cantonal and national borders in coordination with all relevant partners. The Operations Command does not have sufficient opportunities to train on such scenarios. Furthermore, doctrinally the description of tactical tasks is not coherent between the operational and the tactical regulations. Each branch (armor, infantry, and military police) and the Special Forces have developed specific tasks. Furthermore, liaison between the different services is lacking. Only the Special Forces have designated and trained liaison teams. Civil-military coordination in the form of a joint interagency coordination group¹⁹² or coordination centers are not implemented. Further, in the personnel and training domains, the Swiss Armed Forces do not generate enough trained officers to work in joint or operational headquarters.

The fourth strategic task is to prepare to defend Switzerland autonomously or in cooperation with another country against a state hybrid threat after a long term build-up

¹⁹² Department of Defense, Joint Publication (JP) 3-33, *Joint Task Force Headquarters* (Washington, DC: Department of Defense, July 30, 2012), I-8, accessed March 26, 2016. http://www.dtic.mil/doctrine/new_pubs/jp3_33.pdf.

of the defense without the acquisition of major weapon systems. The Swiss Armed Forces limit this task to the three mechanized brigades, subordinated directly to the Army. These brigades are not integrated into an operational force, such as division, which would coordinate and direct land forces¹⁹³ within the operation designed by the Operations Command. The lack of long range fires, effective reconnaissance and air defense systems remove essential elements of the fight at the divisional level. However, planning and training combined arms maneuver, without taking in account fires, air defense and reconnaissance is intellectually incoherent.

The defense competence is the core of a possible build-up. Because Switzerland does not have the appropriate industrial base to develop complex systems, a build-up cannot be based on the acquisition of major systems, such as mechanized forces, air defense systems or long range fires. The available mechanized forces can become the counter-attack forces or cooperate with foreign partners; however, the main build-up in combat units would be limited to light infantry forces. Currently, Switzerland does not field light infantry forces and therefore cannot develop an appropriate doctrine and gain experience through training. Further, the same organizational gaps identified for the third strategic task apply equally to the defense competence. The gap for the fourth strategic task is in the doctrinal organization, training and material domains. The Armed Forces lack a division headquarters for defense land operations, light infantry battalions and appropriate air defense and long range fires systems.

¹⁹³ Department of the Army, Field Manual (FM) 3-94, *Theater Army, Corps, and Division Operations* (Washington, DC: Government Printing Office, April 21, 2014), 6-1 - 6-13, accessed April 23, 2016, http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/fm3_94.pdf.

The author presupposes that the identified gaps have a historical origin. In order to verify this presupposition, the author will identify the main tenets of doctrine, the levels of operational command, joint capable headquarters, mechanisms to create unity of effort and the quality of regulations in *Armee 61*, *Armee 95*, and *Armee XXI*.

Evolution of Swiss Armed forces doctrine and organization

The Cold War era *Armee 61* applied the *Abwehr* [Combined Defense] doctrine. National defense was organized in all directions. Infantry forces defended strong reinforced terrain features including prepared destructions and man-made obstacles, from the border into the depth of the country, while mechanized forces conducted counter-attacks against enemy penetrations and aerial assaults. The entire country was covered by troops. Troops were tasked to counter irregular forces by protecting critical infrastructure. The General Staff and the Army Corps were the operational and joint level headquarters. Unity of effort among all security partners was achieved by the national *Gesamtverteidigung* [Total Defense] organization. Shared understanding was reached through intensive training, deliberate operational plans and the length of service of officers, rather than formal military education based on written doctrine.

Armee 95 applied *dynamische Raumverteidigung* [Dynamic Defense] doctrine which was rationally sound and coherent for the defense and the support of civilian authorities. This doctrine advantageously built on the know-how, organization and facilities of the Cold War. With the reduction of troops, the defense could only be organized in the direction of the threat. Infantry forces defended strong reinforced terrain features, but were not organized in depth. Mechanized forces conducted counter-attacks against enemy penetrations and aerial assaults. The acquisition of long range fires in

order to degrade the enemy and compensate for the absence of depth, as well as improved air defense systems to enable the movement of the mechanized forces was planned. Yet, neither of these systems were acquired. Light infantry forces occupied most of the territory and were tasked to counter irregular forces by protecting critical infrastructure. *Armee 95* doctrine was coherent for defensive and protection tasks; however, it lacked integrated international stability tasks. The General Staff and the Army Corps were the operational commands. The General Staff was the unique joint level headquarters. The *Gesamtverteidigung* [Total Defense] organization achieved unity of effort at the national level. The timely publication of the principles and the pragmatic regulation *Operative Führung 95* enabled militia and career officers to intellectually grasp the new doctrine. Due to the reduced training opportunities and the relatively short duration of *Armee 95*, shared understanding was not achieved at the operational level.

Armee XXI applied a deep-close-rear framework for defense operations against a conventional threat and applied *Raumsicherung* [area security] in the case of an irregular threat. With the further reduction of troops, only a certain portion of the border could be covered. Due to the reduction of prepared demolitions and man-made obstacles and the abandonment of mid-range anti-tank missiles, the blocking capability of the infantry was reduced. Mechanized forces were supposed to be the decisive element; however, long range fires and air defense systems still lacked to support their engagement. Furthermore, due to the massive reduction in infantry forces, a simultaneous engagement as a blocking force and against irregular forces in the rear was unrealistic. These shortfalls led to intensive training at the tactical level without a coherent operational framework. International considerations remained completely separated. *Raumsicherung* [area

security] seemed an appropriate answer to asymmetrical threats; however, due to the lack of a comprehensive legal interagency national security framework, the implementation of the concept failed and was discarded. The Armed Forces lacked a response to threats which went beyond the capabilities of the police and were not in the realm of an interstate conflict.

The Joint Staff, the Army and the Air Force were the operational commands. The Joint Staff was the unique joint level headquarters. *Armee XXI* faced several challenges at the operational level, because roles and functions were not clearly defined and trained. Furthermore, the Joint Staff also had important institutional functions, which required resources that could not be invested in training for the Joint Staff.

Without a functioning replacement for the abandoned *Gesamtverteidigung* [Total Defense] organization, unity of effort could only be achieved through the territorial divisions within their area of operations. The Armed Forces struggled to publish draft regulations several months before the start of *Armee XXI*. Because of the quantity of new concepts and the impossibility to train, common doctrinal understanding was lacking above the tactical level. This situation was demonstrated during the *Stabilo 07* and *Stabilo Due* exercises.

Since the Cold War, the Swiss Armed Forces have maintained certain attributes, even though they do not necessarily provide the appropriate answer to the strategic tasks and to the evolution of the operational environment. The significant deficiencies include maintaining joint coordination at the highest hierarchical level, not integrating international operations in the main body of the Armed Forces, not adapting the defensive doctrine in spite of blatant material deficiencies, not creating coordination mechanisms to

compensate for the abandonment of the *Gesamtverteidigung* [Total Defense] organization, and maintaining an artificial separation between responses to symmetrical and asymmetrical threats. Having demonstrated that the successive reforms have not provided the necessary doctrinal and organizational capabilities to fulfill the strategic tasks, the author will identify which factors drove the institutional force during the reforms.

Causes for doctrinal change in the Swiss Armed Forces

In 1989, the initial impetus for the *Armee 95* reform was the necessity to streamline the military organization and adapt to demographic change. The driving force of change for the *Armee 95* reform was institutional adaptation. The call for strategic change in the form of peace support operations within the 1990 SPR could not overcome the momentum of the initiated organizational reform.

Armee 95 maintained a large militia force centered on defense with a low level of training readiness, and covered peace support with a system of volunteers trained separately. The biennial refresher course rhythm had catastrophic effects on unit level training readiness. The soldiers called upon to protect embassies and support border guards only reached minimal standards after intensive training. Militia officers and NCOs were challenged to organize efficient training during refresher courses. Swiss demographics did not permit the planned manning of units and staffs. Armed Forces leadership already began studying options to correct these training and personnel challenges in the first years of *Armee 95*.

The failure of *Armee 95* as an operational force was primarily due to gaps in the training and personnel domains of the DOTMLPF-P framework. However, *Armee 95* also

failed to fully take in account political level strategic guidance concerning the contribution to peace support operations. Operationally, the Armed Forces furnished the required personnel; however, the military institution did not doctrinally and organizationally integrate this new strategic task. Servicemen applied individually for international operations, then returned to their defense oriented active unit. Regular staffs and units did not train for peace support operations.

In June 1996, barely eighteen months after the start of *Armee 95*, the Department of Defense initiated the *Armee XXI* reform. The 1999 SPR contained novel strategic guidance and called for international cooperation, rapid crisis response to non-state threats, while maintaining the defense competence. However, the institutional force leadership was focused on solving the training and personnel problems of *Armee 95*.

Whereas *Armee 95* had built on time tested structures, *Armee XXI* presented a completely new model in organizations, training, logistics and personnel. The new model aimed to provide the necessary financial and societal balance. New single service soldiers and contract soldiers should have provided the answers to training and personnel challenges. Even though the proposed strategy called for an increase in international participation, the Armed Forces International Command remained a marginal organizational unit. The doctrinal consequences of US led operations following the 9/11 attacks were not fully taken in account. A new Special Forces command was created. However, defensive doctrine which was still decisively based on mechanized attacks, did not adapt to the lack of long range fires and air defense.

After the 2004 implementation of *Armee XXI*, the results were mixed. On one hand units successfully completed operations in Switzerland and abroad. Training in units

improved with the yearly refresher courses and staffs and individuals started training abroad. On the other hand, contract soldiers did not provide an adequate solution to training, militia officers were disgruntled during basic training, logistics malfunctioned, militia battalions had to protect embassies because of the lack of single service soldiers, major exercises failed, there was no personnel increase in international operations, the international training of staffs stopped, and personnel issues reappeared.

In 2005, barely a year after the implementation of *Armee XXI*, the Department of Defense proposed major corrections.¹⁹⁴ In 2009, even before the implementation of the proposed adjustments, Armed Forces leadership commenced planning the *WEA* reform, because fundamental logistical, training, budgetary, and readiness issues could not be addressed in the long term with the adjustments.

The 2010 SPR maintained the strategy of security by cooperation, emphasized the need to implement national cooperation and eliminated *Raumsicherung* [area security]. The *WEA* reform again included major organizational and training changes.

The main cause for change in the *Armee 95*, *Armee XXI* and *WEA* reforms was the need for institutional adaptation. Since 1989, the institutional force has unsuccessfully addressed the challenges of budget constraints, training, readiness, personnel and logistical concerns, through these three reforms. Therefore, the Swiss Armed Forces have been in a continuous state of reform since 1995. The lack of an imminent strategic threat,

¹⁹⁴ Swiss Department of Defense, *Examen des objectifs de l'armée – Rapport à l'attention de l'Assemblée fédérale*, (December 31, 2005), 10-12, accessed March 26, 2016. <http://www.vbs.admin.ch/internet/vbs/fr/home/documentation/bases/verteidigung.parsys.0009.downloadList.00091.DownloadFile.tmp/bericht2005149bmgf.pdf>.

the quality of militia and career leaders as well as the flexibility and pragmatism of the militia serviceman have protected the Swiss Armed Forces from operational failure.

Institutional commands of the Armed Forces have dedicated their energy to these reforms and ongoing operations. Therefore, the Armed Forces have not been able to allocate sufficient resources in personnel and time to doctrinal thought. During these 20 plus years of reform, Armed Forces leadership adapted doctrine as the last piece of the DOTMLPF-P puzzle and not as the first intellectual step to implementing strategic changes or adapting to the operational environment.

During the last 25 years the institutional force has not been able to provide adequate capabilities to fulfill the strategic tasks, sound political-military relations could have informed the reform. In the next section the author will explore the evolution of political military-mechanisms.

Swiss political-military mechanisms

Political-military mechanisms have been affected by the evolution of Switzerland's strategic environment, its Armed Forces and its political orientation. Four major trends have marked Swiss political-military relations since the end of the Cold War. First is the diminishing presence of militia officers with operational and joint level expertise. Second is the enlargement of the understanding of security policy. Third is the refusal of political authorities to implement an overarching coordinating structure for security matters. Fourth is the development of a political stalemate with regards to the development of the Swiss Armed Forces. Each of these trends affects the development and the usage of doctrine.

The first trend marking Swiss civil-military relations is the diminishing number of expert militia officers. During the Cold War, operational level exercises were conducted on a regular basis with the participation of militia officers, who developed operational and joint level expertise. These expert militia officers were integrated in political networks or were even themselves politicians and were active as professionals in the private sector economy, administration or academia.¹⁹⁵ The overlapping professional, military and political networks presented two advantages which overcame the lack of a traditional professional officer corps and the lack of explicit written doctrine. First, these expert militia officers were engaged in political activities, thereby bridging the civil-military gap. They brought political considerations into the military and they explicated operational challenges within the political level. Second, these expert militia officers were a vector of innovation for the Armed Forces due to their expertise in other fields. They challenged the inherent conservatism of the military institution.

The down-sizing of the Armed Forces, the reduction of operational level commands, and the induced decrease in operational level training has reduced the number of operational level military expert militia officers. There are still militia officers with military expertise; however, most reside at the tactical level. The lack of politically active operational level expert militia officers has reduced the debate on military matters at political level to financial, organizational and tactical matters. Budget increases, material acquisition and the number of available troops are essential for the material readiness of the Armed Forces. However, the intellectual readiness of the Armed Forces is reached by

¹⁹⁵ Carlo Vinzenz, "Führung der Armee Beitrag der Miliz," in *Erinnerung an die Armee 61* ed. Franz Betschon and Louis Geiger (Frauenfeld: Verlag Huber, 2009), 62.

a coherent and implemented doctrine. The intellectual readiness was implicitly monitored during the Cold War by the expert militia officers and the exercises of the Chief of Staff for operational training.

Today, faced with operational questions, politicians will call career officers formally or informally for information. Coherent doctrine enables to bridge directly and indirectly this recent gap in civil-military relations. Directly, by giving militia officers and non-military politicians an intellectual construct, which enables them to understand the operational employment of the Armed Forces. Indirectly, by contributing to create a common understanding among Swiss career officers.

The second trend marking Swiss civil-military relations is the enlargement of the understanding of security policy since the end of the Cold War. The definition of security policy has evolved from the use of all national means to support the Armed Forces against hostile acts against the country¹⁹⁶ in 1973, to all federal, cantonal and local measures taken in order to prevent or counter political-military or criminal threats against the country or its population in 2015.¹⁹⁷

The broadened definition of security policy changes the relationship between SPR and Armed Forces concepts (master plan or Armed Forces reports). As illustrated in Figure 5, in the past the SPR was the main source for Armed Forces concepts, whereas today, military reflection has gained a significant role. Military reflection is the independent thought by military professionals or scholars pertaining to the utilization of

¹⁹⁶ Federal Council, *Rapport sur la politique de sécurité* (1973), 140.

¹⁹⁷ Federal Council, *Rapport sur la politique de sécurité* (2015), 93.

Armed Forces. Consequentially, the Armed Forces have to invest more resources in doctrinal research and writing.

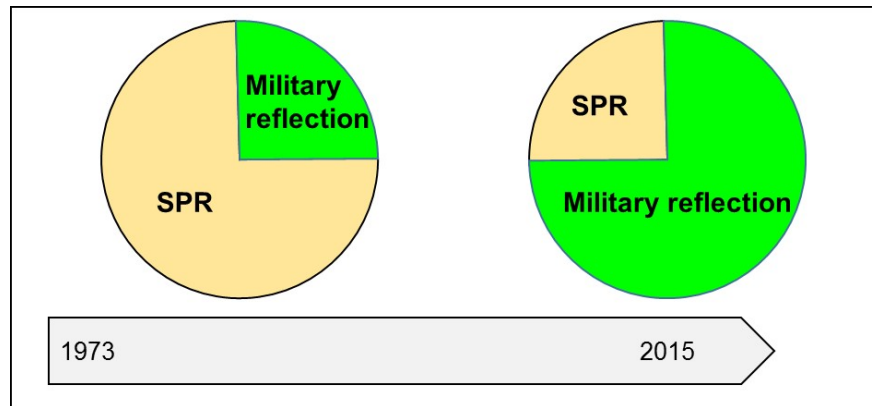


Figure 5. Evolution of sources for Armed Forces concepts

Source: Created by author.

The third trend marking Swiss civil-military relations is the refusal of political authorities to implement an overarching coordinating structure for security matters. During the Cold War and the *Armee 95* era, the *Gesamtverteidigung* [Total Defense] organization provided a robust national security architecture. The staff of the Apparatus for Strategic Direction, proposed by the 1999 SPR, was disbanded in 2011. The Swiss Security Network, implemented through the 2010 SPR, is a coordinating organ and does not answer several of the questions relating to decision making in crisis situations. The Federal Council has stated its intention to remain flexible in the configuration of its crisis response mechanisms. This situation stems from two causes. First, the mutation of the threat has increased the role of Cantons, which are responsible for interior security.

Cantons, as political entities, are not willing to let decisional power go to the Confederation. Second, the creation of a Federal security instrument takes time because of the implications of the fragile balance of power within the Federal Council. The Cantons have used their renewed role to eliminate the area security operations which implied a certain loss of cantonal control.

Consequently, as illustrated in Figure 6, the Armed Forces operate in a less structured environment than in the era before 2003. Relations between the different elements of security policy are less hierarchically determined and formalized. The Armed Forces as an organization and the sub organizations have to develop increased flexibility. In this regard, the *WEA* organization lacks mechanisms to navigate with flexibility, because the territorial divisions are arrayed along cantonal boundaries.

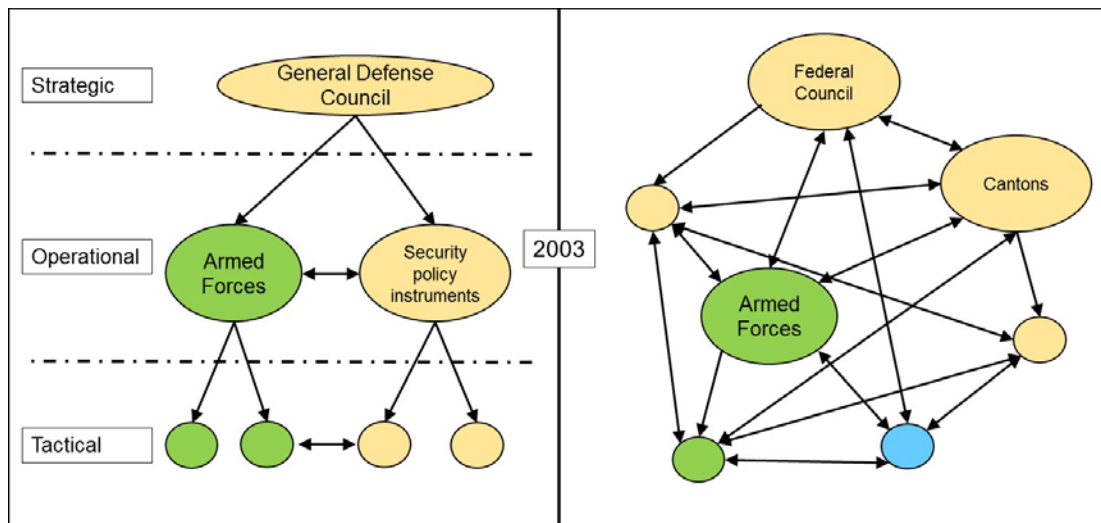


Figure 6. Evolution of sources for Armed Forces concepts

Source: Created by author.

The fourth trend marking Swiss civil-military relations is the political stalemate with regards to the development of the Swiss Armed Forces. The political stalemate between the three main security-related political trends (autonomist, cooperationist, and reductionist) affected the coherence of the 2010 SPR. None can harness a solid majority in order to impose their intent, but each can group with another trend to block the intent of the third. The consequence of this situation is that the political level does not coherently influence the development of the Armed Forces.

The Armed Forces have the responsibility to synchronize the DOTMLPF-P framework of the operational force according to the realities of the operational environment so that whatever the political choice, the operational force is ready. This principle is limited by options which are unconstitutional or not supported by any of the three political trends, such as international operations without a UN mandate.

Doctrinal evolution over the past 25 years has been impeded by Armed Forces internal considerations and biased political-military mechanisms. In the next section, the lessons of operations and major exercises will be analyzed, because these lessons influence military professionals.

Lessons from operations and major exercises

Switzerland has not been subject to war in over 150 years. Since 2004, all operations of the Swiss Armed Forces have been successful and Swiss Armed Forces leadership has highlighted this success as evidence for the Swiss Armed Forces

contribution to the country's security.¹⁹⁸ The author will critically analyze the relevance of operations to the doctrinal and organizational development of the Armed Forces.

Operations abroad and in Switzerland have been recurring for over ten years. The threat in the Balkans and in Switzerland can be considered latent, even if there have been limited cases of an elevation of the threat. Operations abroad and in Switzerland provide relevant experience at the soldier and small unit level; however, they are not challenging for the Armed Forces as an organization because they are recurring. For the Armed Forces, these operations can be solved with bureaucratic best practices. Personnel and units have to continue to prepare these types of operations because they will most certainly continue in the next five to ten years. A reduction in personnel training readiness, similar to the situation in *Armee 95*, is unacceptable. Using these successful operations as an informational tool for the public is acceptable and probably necessary; however, this success cannot be used as benchmark for the readiness of the operational force.

To the contrary, the two exercises *Stabilo 07* and *Stabilo Due* conducted in 2007 and 2012 by the Operational Training Command, demonstrated that the Swiss Armed Forces are not ready to counter a complex threat in a modern environment. One particular weakness found during both exercises were deficiencies in operational planning and joint coordination by the Joint Staff. These deficiencies are a result of a lack of common

¹⁹⁸ André Blattmann, "Avant-propos du chef de l'Armée," *2014 Rapport annuel de l'Armée suisse* (2015), 6, accessed March 25, 2016, http://www.vtg.admin.ch/internet/vtg/fr/home/dokumentation/publik_zeitschr/jabe.parsysrelated1.38039.downloadList.36124.DownloadFile.tmp/81129dfijabe2014.pdf (translation by author).

doctrinal understanding, a lack of training of militia and career officers, and an inadequate organization which centralizes too many tasks at the Joint Staff headquarters.

Career officers are more likely to gain experience in current international or domestic operations than in a major exercise. They are at risk of innovating according to irrelevant experience. After having demonstrated that the three sources of doctrinal change, the institutional force, the political level and career officers are subject to bias, in the next section, the author will identify constraints in the strategic documents that are caused by domestic issues or military institutional resistance to change.

Constraints in Swiss strategic documents

The 2010 SPR, 2010 AFR, and the 2014 message to the Federal Assembly on *WEA* presented six explicit and implicit constraints for the four strategic tasks that stem from domestic issues or military institutional resistance to change.

The first strategic task is to contribute capabilities, on short-notice, to maintain peace in areas with latent, elevated or non-state hybrid threats. The strategic documents state that recruiting and training of contingents for international operations takes several months. This guideline applies to the current system which employs a separate command to train and deploy individuals and units for international operations. This system was developed during the 1990s, when the necessary skills for peace-keeping were different from the skillset of the Cold War soldier. While the 1990 and 1999 SPRs called for an increase in available personnel for international operations. The Armed Forces have resisted change and have not met the requirements because instead of preparing units beforehand, the current system only begins recruiting and training once an international mission is accepted.

The second strategic task is to support, on short-notice, civilian authorities in Switzerland in exceptional situations at the latent or elevated threat levels. In this case, due to the decade long WEF experience and the protection of the 2008 European soccer championship, the implied constraint is that civilian authorities are able to express detailed requirements in advance to the Operations Command, which can provide orders to all the elements of the military component. Due to the complexity of most situations, elements from the joint force (ground, air, EW, Special Forces, CBRN, logistics) are required. In an operational environment, characterized by an ever-growing rapidity of change, timely detailed formulated requirements by the civilian authorities cannot be considered a guaranteed prerequisite. As schematically illustrated in Figure 7, the requirements of civilian authorities depend on the complexity of the situation and available time. Facing complex situations on short-notice, a small joint task force may be required.


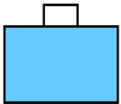

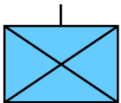
More complex		
Less complex		
	More time	Less time

Figure 7. Organization and capabilities for support to civilian authorities

Source: Created by author.

The third strategic task is to defend the country and its population, on short notice, against a non-state hybrid threat. Historically, the contribution of the Armed Forces against an irregular threat has been the protection of critical infrastructure. During the Cold War, the dominant opinion was that Soviet forces would use irregular forces against critical infrastructure in order to destabilize and degrade the capabilities of the state before the ground invasion. The irregular forces were highly trained Special Forces and required the engagement of considerable line units to protect infrastructure. For example, an entire infantry battalion was required for the protection of a nuclear plant. The probable use of highly trained Special Forces against essential infrastructure is the depiction of the state hybrid threat, not of the non-state hybrid threat. The non-state hybrid threat operates mainly against the population or targets which will have a large repercussion in the information sphere. Depending on the situation, military power may be used to protect infrastructure; however, it is also possible that a joint force may use other stability tasks, or even offensive tasks to counter a hybrid threat.

The fourth strategic task is to prepare to defend Switzerland autonomously or in cooperation with another country against a state hybrid threat after a long term build-up of the defense without the acquisition of major weapon systems. The 2010 AFR proposes to maintain the defense competence by training combined arms at the mechanized brigade level.¹⁹⁹ The mechanized component of the Swiss Armed Forces survived the multiple reductions of the Armed Forces as a token to political commitment to the defense of the country. However, with the *Abwehr* [Combined Defense] and *dynamische*

¹⁹⁹ Federal Council, *Rapport sur l'armée 2010*, 54.

Raumverteidigung [Dynamic Defense], the enemy should have been degraded by strong infantry defensive positions or long range fires or air-ground support. Furthermore, the movement of large mechanized formations requires an appropriate air defense. The defensive strength of infantry has been massively reduced by quantitative reduction of troops and the abandonment of prepared demolitions. The Swiss Armed Forces do not have air to ground capabilities, long range fires or an appropriate air defense, which can all be considered as major defense systems.

Two other historical remnants can be critically questioned. First, the alignment of territorial divisions along cantonal borders. This stems from the *Gesamtverteidigung* [Total Defense] organization which ensured unity of effort, and the consideration that cantonal police forces were a unique security partner. There is an undeniable need to assure durable liaison with cantons; however, this cannot be detrimental to realizing unity of effort with all other partners. The second remnant is the centralization of joint coordination at the operational level. This centralization is a product of the abandonment of three levels of command (corps, division, and regiment) with *Armee XXI*. The Army, the Air Force and the Special Forces, electronic warfare and cyber forces, and CBRN forces are considered joint elements. The Swiss Armed Forces historically lack a headquarters which can effectively coordinate joint operations at the tactical level. However, the effective use of military power requires unity of action of the joint force.

After having presented biased constraints in strategic documents, the author will present the barriers which hinder adequate doctrinal creation in the three sources of doctrinal change.

Barriers to doctrinal evolution

First, due to the political stalemate, the Swiss political level cannot dictate a clear strategy. Security policy scholars described the 2010 SPR as “little strategy, lots of politics.”²⁰⁰ Confronted with the impossibility to overcome their differences, legislative representatives will switch to debating details and using the Armed Forces as a tool for political posture. This is probably a similar plight of other Armed Forces which do not face imminent and clear threats. However, this political stalemate tends to be mirrored into doctrinal guidelines.

Second, the office for doctrine is integrated into the office for corporate development, within the Armed Forces Staff. This institutional distance between the office for doctrine and training commands impedes the integration of training lessons in doctrine and the dissemination of doctrine in training. In contrast, the creation of TRADOC by the US Army in 1973 played an essential role in the transformation of the US Army after Vietnam.²⁰¹

Third, career and militia officers are not given the opportunity to develop a common understanding in order to become experts in joint and operational art. Military training for militia officers ends at the tactical level, even if there have been efforts to implement joint and operational training at the General Staff School. Career officers have

²⁰⁰ Andreas Wenger, Victor Mauer, and Daniel Möckli. “Sicherheit politischer Bericht 2010: viel Politik wenig Strategie,” *Bulletin 2010 zur schweizerischen Sicherheitspolitik* (2001): 9-26, accessed December 18, 2015, <http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/Bulletin-2010-9-26.pdf>.

²⁰¹ Nielsen, *An Army Transformed*, 44.

the opportunity to study abroad in military institutions; however, these experiences are not condensed into a common approach. Furthermore, the acquisition of practical joint and operational experience is limited, because there is only one operational and joint staff and major exercises are only conducted every four years.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The purpose of this study was to evaluate the state of Switzerland's military doctrine and organizations after more than 20 years of reform, understand the causes of any deficiencies and propose recommendations to amend the situation. This chapter will draw conclusions from the analysis in order to answer the primary question: What doctrinal and organizational changes are required of the Swiss Armed Forces in order to fulfil their strategic tasks?

The first step of the analysis identified the four following strategic tasks:

1. Contribute capabilities, on short-notice, to maintain peace in areas with latent, elevated or non-state hybrid threats.
2. Support, on short-notice, civilian authorities in Switzerland in exceptional situations at the latent or elevated threat levels (serious threats to internal security).
3. Defend the country and its population, on short notice, against a non-state hybrid threat.
4. Prepare to defend Switzerland autonomously or in cooperation with another country against a state hybrid threat after a long term build-up of the defense without major weapon systems acquisition.

The subsequent capabilities based assessment between requirements stemming from the strategic tasks and the *WEA* force capabilities revealed the following gaps in the doctrinal, organizational and personnel domains: a lack of trained personnel and formed units for international operations; the absence of common doctrinal principles; an

overutilization of the Operations Command for recurrent operations; the lack of a battalion level combined arms task force headquarters; the lack of a joint level organization which could conduct offensive tasks against a hybrid threat; the lack of training for the Operations Command; the lack of standard flexible liaison and coordination mechanisms in order to achieve unity of effort with all relevant partners; an insufficient generation of trained officers to work in joint or operational headquarters; the lack of divisional headquarters; and finally the lack of light infantry units.

The analysis demonstrated that the three sources of doctrinal change (the political level, the institutional force and the military professional) are prejudiced. The institutional force's reform efforts has been driven by financial, training, personnel and logistical concerns. Furthermore, most institutional resources have been monopolized by 25 years of continuous reform. The political level is hindered by the political stalemate and the disappearance of expert militia officers who could bridge the civil-military gap. The professional military are exposed to experiences which do not improve individual and organizational knowledge of an anticipated time-constrained operational environment facing a hybrid threat.

This situation has caused the emergence of constraints in strategic guidance, which stem from domestic issues or military institutional resistance and barriers to change in the three sources of doctrinal reform. The barriers to doctrinal evolution in the Armed Forces are the mirroring of the political stalemate in doctrinal guidelines, the institutional distance between training and doctrine and the absence of operational and joint common understanding among militia and career officers.

The development of a flexible doctrine and adequate organizations to counter a hybrid threat is a daunting task. Instead of trying to strictly separate the core competencies of wide area security and combined arms maneuver, the US Army's concept of unified land operations proposes to use a free combination of offensive, defensive and stability tasks in all operations.²⁰² The Swiss Armed Forces have yet to take that step. The response to complex situations requires the designation of one operational level headquarters in order to synchronize and coordinate all military actions. The planned Operations Command, which sheds most of the institutional functions and will become the sole operational level headquarters, is a positive evolution. The creation of this command brings clarity and focus, and enables training.

Unity of effort can only be reached in collaboration with all relevant actors. The US Armed Forces uses a JIACG or a CMOC to achieve this effect.²⁰³ Up to 2004 and the start of *Armee XXI*, the *Gesamtverteidigung* [Total Defense] organization fulfilled this role. The Armed Forces could then inform hierarchically on necessary coordination. The Armed Forces organization still mirrors this centralized territorial approach which is inappropriate with today's numerous local, regional, national, and international governmental and non-governmental security actors. Without proper mechanisms, the coordination of military actions with partners other than cantons must fall upon the Operations Command, which further congests this level of command.

²⁰² Department of the Army, Army Doctrine Publication (ADP) 3-0, *Unified Land Operations* (Washington, DC: Government Printing Office, 10 October, 2011), 6.

²⁰³ Department of Defense, JP 3-33, *Joint Task Force Headquarters*, I-9 - I-10.

The use of military power in today's operational environment, requires the utilization of synchronized joint effects at the tactical level.²⁰⁴ The Swiss Armed Forces have not followed this trend and pursued the centralization of joint coordination at the operational level. This centralization has three negative effects. First, it limits the flexibility of subordinate commands, which is not the trend followed by the US Armed Forces which foresees the use of the Army division as a possible joint headquarters.²⁰⁵ Second, it obstructs the Operations Command with menial joint coordination tasks. Third, it limits the opportunities of joint training for militia and career officers.

With the militia system, doctrine is disseminated through operational unit training, because of the limited amount of formal education. In order to disseminate the tenets of joint and civil-military coordination, the Armed Forces would do well by delegating these actions to the lowest level possible and training more frequently.

For the *WEA* reform, doctrine is adapted as the last element of the DOTMLPF-P framework. Furthermore, independent doctrinal and training developments were allowed along the range of operations (international, support to civilian authorities and defense). The defense doctrine was developed, even though essential elements such as long-range fires and air defense systems were absent. Doctrine and organizations were not able to replace the unity of effort lost with the abandonment of the *Gesamtverteidigung* [Total Defense] organization. Writing and implementing coherent doctrine throughout the

²⁰⁴ Department of Defense, JP 3-33, *Joint Task Force Headquarters*, I-2.

²⁰⁵ Department of the Army, FM 3-94, *Theater Army, Corps, and Division Operations*, 6-1.

Armed Forces contributes to creating shared understanding; however, it requires sufficient resources in quantity and quality.

Recommendations

The author proposes six recommendations in order to answer the primary research question of this study: What doctrinal and organizational changes are required of the Swiss Armed Forces in order to fulfil their strategic tasks?

First, the Swiss Armed Forces should merge the doctrine office with the training command in order to facilitate exchanges between training lessons and doctrine writing. This merger will create synergies in training and doctrinal development. The doctrine office has to receive the adequate personnel resources, in quantity and quality.

Second, the Swiss Armed Forces need to create, verify and publish an overarching operational doctrine across the range of military operations in order to create the foundations of common shared understanding. The doctrine has to be applicable across the entire Armed Forces to all four strategic tasks. This doctrine should be based on the constitutional tasks, military principles and the operational environment. The doctrine needs to integrate the principles of unified action and joint synchronization and encompass all military tasks. The Swiss Armed Forces should implement liaison mechanisms between the joint partners, with all relevant security partners at the Operations Command, in division and brigade level headquarters.

Third, the Swiss Armed Forces have to create adequate training and education at the operational level. The Operational Training Command has to be appropriately manned. The quantity and quality of the assigned personnel has to enable the Command to conduct independently annual large complex exercises. The Chief of Staff of

Operational Training should become a full time function. The interval between major exercises within the Operations Command has to be shortened. Divisional level headquarters have to be regularly trained in multi-level exercises. The Swiss Armed Forces should create a joint operational course for career and militia officers. The course program should be flexible (online lessons, weekend lessons) in order to allow militia officers to participate and to allow a longer period of learning.

Fourth, the roles and the manning of headquarters have to be revised in order to enable flexibility at lower hierarchical levels and to train according to the strategic tasks. Territorial division headquarters should be manned, organized, and equipped in order to conduct independent joint operations in support of civilian authorities. This liberates resources in time and personnel at the Operations Command and increases joint experience among militia and career officers. The creation of a divisional headquarters subordinated to the Army, would allow them to prepare for complex joint operations against non-state hybrid threats, across cantonal and international borders, and maintain the defense competence, above the brigade level. The creation of a light infantry brigade would allow the development of the light infantry competence.

Fifth, the Swiss Armed Forces should integrate international training and single-service soldiers in the main body of the operational force. The Swiss Armed Forces should man, equip and train three infantry battalions for international operations and domestic support of civilian authorities among the active units. Soldiers in these battalions would declare their readiness to be deployed during a certain amount of years. These battalions would be partially staffed by career officers. The single-service infantry companies should be attached to these battalions. These battalions would receive

increased logistical and command support capabilities, enabling them to independently conduct smaller scale combined arms operations. These battalions would augment Switzerland's readiness for international operations and contribute to unified action among the Armed Forces. Consequentially the International Command should only be tasked to train individuals, such as military observers, and should maintain liaison with units and troops in ongoing operations

Finally, the Swiss Armed Forces should separate the development of their forces from governmental security policy documents. The US Armed Force joint concept framework²⁰⁶ provides an adequate approach. The Capstone Concept for Joint Operations presents the fundamental ideas about the future. This concept is supported by the joint operating concept and supporting joint concepts. The concept framework enables the development of all DOTMLPF-P domains and separates force development from immediate political issues. At the same time, the government should establish broader reporting mechanisms. SPR should be produced regularly in order to evaluate the operational environment and to set strategic priorities. The Armed Forces should report annually to the parliament on current and future issues.

Due to the National Council's 2014 rejection of the reform, the Swiss Armed Forces have received an additional year before the implementation of *WEA*. Armed Forces leadership would be well advised to use the available time and resources to develop a coherent doctrine within a Swiss Armed Forces Capstone Concept. These documents are the required framework to successfully fulfill the Armed Forces strategic

²⁰⁶ Filiberti and Kelly, *2015–2016 How the Army Runs*, 3-11.

tasks. Moreover, considering the popular refusal of the *Gripen*, parliamentary stalling, and the *Stabilo Due* exercise failure presented in the introduction, a coherent doctrine within a Capstone Concept is necessary to rebuild shared understanding and bridge the emerging political-military divide.

GLOSSARY

Armee 61 [Armed Forces 61]. Designation of the Swiss Armed Forces between 1961 and 1994.

Armee 95 [Armed Forces 95]. Designation of the Swiss Armed Forces between 1995 and 2003.

Armee XXI [Armed Forces XXI]. Designation of the Swiss Armed Forces since 2004.

Battle group. A combined arms military unit, based around an infantry or armored battalion, reinforced with command and support capabilities.

Canton. Swiss federal state. The Swiss confederation is composed of 26 cantons, which each has its own constitution and political organization.

Civil protection. Swiss organization responsible for protecting the civil population in the case of a natural disasters, emergency situations or armed conflict. Organized by canton the national office has a coordinating role.

Contract serviceman. Officer or NCO hired for a limited period of time.

Deep-close-rear framework. Organization of the battlefield in which commanders conduct actions simultaneously in close contact, in the depth of the enemy forces and in the own rear area in order to maximize effects.

Defense competence. Ability of the Armed Forces to maintain the core capabilities related to the defense of the country in order to build-up the complete defense in the case of the reemergence of a state based threat. Defense competence includes maintaining trained personnel and material.

Federal Assembly. Switzerland's legislative branch is composed of the 200-seat National Council, representing the population of the cantons, and the 46-seat Council of States (each canton has two seats and the half-cantons have one).

Federal Council. Highest executive authority of Switzerland, composed of seven members. The Federal Councillors represent the main parties and are elected by the Federal Assembly. Each Federal Councillor heads a government department. Decisions are made along the concordance principle.

Gesamtverteidigung [Total Defense]. Organization of all the means of the Federal State, the cantons and the economy to face an aggressor.

Hybrid warfare. The combination of regular, irregular, terrorist and criminal threats used by a state or non-state actor.

Income compensation allowance. This government fund partially reimburses the militia member's salary during military service.

Institutional force. The institutional force supports the operational force by raising, training, equipping, deploying and preparing the force.

Modularity. The ability to organize military units with sub-units originally from other units.

Operational force. The operational force conducts operations.

Security Policy Report (SPR). The SPR is a strategic document published by the Federal Council that describes threats and dangers, strategy, and tasks of the different instruments of security policy.

Service day. A service day is a day when militia personnel serve in a function in the Armed Forces. The maximum service days in a year per individual is defined by law.

Single service servicemen. Servicemen who accomplish their military service in one period instead of over multiple refresher courses. In order to maintain the militia concept, the number of single service servicemen is limited to 20 percent of an age-group.

Territorial region. Division level military unit of the Swiss Armed Forces. The territorial region has a pre-determined area of responsibility, which coincides with a several cantons. The territorial region has the responsibility of the liaison with the cantons in the area of responsibility. As of 2015, the territorial region only has two to three battalions organically attached.

Threats and dangers. The nature of the threat includes a will to harm Switzerland or at least accept harm to the country. To the contrary, dangers, such as man-made or natural disasters, do not have a will.

Unified Action. Unified action synchronizes, coordinates, and/or integrates joint, single-Service, and multinational operations with the operations of other governmental departments, nongovernmental organizations, intergovernmental organizations, and the private sector to achieve unity of effort.

Weiterentwicklung der Armee (WEA). WEA is the Armed Forces reform initiated by the SPR 2010.

BIBLIOGRAPHY

Books, Monographs

- Avant, Deborah D. *Political Institutions and Military Change—Lessons from Peripheral Wars*. London: Cornell University Press, 1994.
- Betschon, Franz. “Mobilmachung und Einsatzbereitschaft.” In *Erinnerung an die Armee 61*, edited by Franz Betschon, and Louis Geiger, 139-149. Frauenfeld: Verlag Huber, 2009.
- Braun, Peter. “Die Armee 61: Einsatzdoktrin Heeresorganisation materielle Rüstung.” In *Die Planung der Abwehr in der Armee 61*, edited by Peter Braun, and Hervé de Weck, 17-34. Bern: Schweizerische Vereinigung für Militärgeschichte und Militärwissenschaft, 2009.
- Catrina, Christian. “Defense Reform in Switzerland.” In *Post-Cold War Defense Reform*, edited by Istvan Gyarmanti, and Theodor Winkler, 1-18. Washington, DC: Brassey’s, 2002.
- Filiberti, Edward J., and Jerome F. Kelly. “Chapter 3 Force Management.” In *2015–2016 How the Army Runs, A Senior Leader Reference Handbook*, edited by Louis Yuengert, 3-1 – 3-36. Carlisle, PA: U.S. Army War College, 2015.
- Gat, Azar. *A History of Military Thought: From the Enlightenment to the Cold War*. Oxford, GB: Oxford University Press, 2001.
- Hamlett, Greg, and Robert Hume. “Chapter 10 Capability Requirements and Materiel System Research, Development, and Acquisition Management.” In *2015–2016 How the Army Runs, A Senior Leader Reference Handbook*, edited by Louis Yuengert, 10-1 – 10-73. Carlisle: U.S. Army War College, 2015.
- Herbert, Paul H. *Deciding What has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations*. Fort Leavenworth, KS: Combat Studies Institute, 1988.
- Jackson, Aaron P. *The Roots of Military Doctrine: Change and Continuity in Understanding the Practice of Warfare*. Fort Leavenworth, KS: Combat Studies Institute Press, 2013. Accessed November 6, 2015. <http://usacac.army.mil/Cac2/cgsc/carl/download/csipubs/RootsOfMilitaryDoctrine.pdf>.
- Kerttunen, Mika. “Reforms in Finnish Defense.” In *Post-Cold War Defense Reform* edited by Istvan Gyarmanti, and Theodor Winkler, 205-223. Washington, DC: Brassey's, 2002.

- Kretchik, Walter E. *U.S. Army Doctrine –From the American Revolution to the War on Terror*. Lawrence, KS: University Press of Kansas, 2011.
- Küchler, Simon. “Die überlegene Stärke der Miliz.” In *Erinnerung an die Armee 61* edited by Franz Betschon, and Louis Geiger, 109-115. Frauenfeld: Verlag Huber, 2009.
- Mcphee, John A. *La Place de la Concorde Suisse*. New York: Farrar / Straus / Giroux, 1984.
- Meinhart, Rich, and Martha Stewart. “Chapter 2 Strategy.” In *2015–2016 How the Army Runs, A Senior Leader Reference Handbook*, edited by Louis Yuengert, 2-1 – 2-25. Carlisle, PA: U.S. Army War College, 2015.
- Millett, Allan R. “Patterns of military innovation.” In *Military Innovation in the Interwar Period*, edited by Williamson Murray, and Allan R. Millet, 329-368. New York, NY: Cambridge University Press, 2009.
- Murray, Williamson, and Barry Watts. “Military Innovation in Peacetime.” In *Military Innovation in the Interwar Period*, edited by Williamson Murray, and Allan R. Millet, 369-415. New York, NY: Cambridge University Press, 2009.
- Nielsen, Suzanne C. *An Army Transformed: The U.S. Army's Post-Vietnam Recovery and the Dynamics of Change in Military Organizations*. Carlisle, PA: Strategic Studies Institute, 2010.
- Okros, Alan. *Leadership in the Canadian Military Context*. Toronto, CA: Canadian Forces Leadership Institute, 2010. Accessed March 28, 2016. http://www.defence.gov.au/ADC/Docs/CDLE/CDLE_120329_OkrosA2010LeadershipintheCanadianMilitaryContext.pdf.
- Posen, Barry R. *The Sources of Military Doctrine–France, Britain, and Germany between the World Wars*. London: Cornell University Press, 1984.
- Rosen, Stephen Peter. *Winning the Next War–Innovation and the Modern Military*. London: Cornell University Press, 1994.
- Szvircsev Tresch, Tibor. *Europas Streitkräfte im Wandel: Von der Wehrpflichtarmee zur Freiwilligenstreitkraft*. Zürich, 2005. Accessed January 1, 2016., <http://www.vtg.admin.ch/internet/vtg/de/home/schweizerarmee/organisation/hkaneu/milak/militaerwissenschaftliche/militaersoziologie/publikationen.parsys.64809.downloadList.65214.DownloadFile.tmp/202szvircseveuropasstreitkrfteimwandel.pdf>.
- Vinzenz, Carlo. “Führung der Armee Beitrag der Miliz.” In *Erinnerung an die Armee 61* edited by Franz Betschon, and Louis Geiger, 58-74. Frauenfeld: Verlag Huber, 2009.

Periodicals

- Abegglen, Christoph. "Von der Strategischen Klammer." *Military Power Review der Schweizer Armee*, 2 (December 2014): 19-27. Accessed November 6, 2015. http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.37117.DownloadFile.tmp/mpr115.pdf.
- Andrey, Dominique. "Quelques considérations sur l'emploi de nos forces terrestres." *Military Power Review der Schweizer Armee*, 2/2013 (December 2013): 5-17. Accessed November 7, 2015. http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.27059.DownloadFile.tmp/mpr213.pdf.
- Arnold, Michael. "Operative Schulung (I): Auseinandersetzung mit einem Erbe." *Allgemeine schweizerische Militärzeitschrift*, 7 (July 2015): 39-41.
- Bachofner, Hans. "Armee im Wandel." *Allgemeine schweizerische Militärzeitschrift*, 10 (October 1989): 635-636. Accessed November 8, 2015. <http://retro.seals.ch/digbib/view2?pid=asm-004:1989:155::776>.
- Badet, Jean-Pierre. "Die operative Schulung heute und morgen." *Allgemeine schweizerische Militärzeitschrift*, 3 (March 2005): 18-20. Accessed April 6, 2016. <http://www.e-periodica.ch/cntmng?var=true&pid=asm-004:2005:171::1037>.
- Bonard, Claude. "L'armee suisse lors de la venue de Yasser Arafat." *Revue militaire suisse*, 11 (November 1997): 12-17. Accessed April 24, 2016. <http://www.e-periodica.ch/cntmng?var=true&pid=rms-001:1997:142::921>.
- Braun, Peter, and Daniel Fuhrer. "Die geplante Weiterentwicklung der Schweizer Armee (WEA) in ihrem historischen und internationalen Kontext." *Military Power Review der Schweizer Armee*, 2/2013 (December 2013): 19-33. Accessed November 7, 2015. http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.27059.DownloadFile.tmp/mpr213.pdf.
- Bühlmann, Christian. "Die Führungsreglemente XXI und das operative Denken: militärische Doktrin, Theorie und Praxis." *Allgemeine schweizerische Militärzeitschrift*, 3 (March 2015): 3-6. Accessed February 15, 2016. <http://retro.seals.ch/cntmng?pid=asm-004:2005:171::1006>.
- Curtenaz, Sylvain, Laurent Currit, Christian Lanz, David Rieder, and Christoph Abegglen. "Doctrine de l'Armée: état des travaux et perspectives." *Military Power Review der Schweizer Armee*, 1/2013 (May 2013): 27-38. Accessed November 6, 2015. http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.24380.DownloadFile.tmp/mpr113web.pdf.

- Däniker, Gustav. "Die «Operative Führung» Starthilfe für die «Armee 95»." *Allgemeine schweizerische Militärzeitschrift*, 6 (June 1994): 20-21. Accessed November 8, 2015. <http://retro.seals.ch/cntmng?pid=asm-004:1994:160::832>.
- Dousse, Jacques interviewed by Charles Ott. "Warten auf die Garantearbeiten für die Armee 95." *Allgemeine schweizerische Militärzeitschrift*, 7/8 (August 1999): 10-11. Accessed April 9, 2016. <http://www.e-periodica.ch/digbib/view?pid=asm-004:1999:165::1011#378>.
- Haltiner, Karl W. "Was unterscheidet die Schweizer Miliz von anderen Armeen?" *Allgemeine schweizerische Militärzeitschrift*, 5 (1998): 11-13. Accessed January 2, 2016. <http://retro.seals.ch/cntmng?pid=asm-004:1998:164::916>.
- Howard, Michael. "Military Science in an Age of Peace." *RUSI Quarterly* 119 (March 1974): 3-11.
- Jost, Hans-Ulrich. "Congrès de Vienne: quand l'Europe fonde la Suisse moderne." *L'Hebdo*, (October 10, 2014). Accessed February 29, 2016. <http://www.hebdo.ch/hebdo/id%C3%A9s-d%C3%A9bats/detail/congr%C3%A8s-de-vienne-quand-1%E2%80%99europe-fonde-la-suisse-moderne>.
- Juilland, Dominique. "Der Stab Operative Schulung an der Schwelle des nächsten Jahrtausends." *Allgemeine schweizerische Militärzeitschrift*, 1 (January 1998): 7-8. Accessed January 2, 2016. <http://retro.seals.ch/digbib/view?pid=asm-004:1998:164::20>.
- Landmann, Lukas. "Dynamische Raumverteidigung Fünf Thesen zu Armee 95." *Allgemeine schweizerische Militärzeitschrift*, 9 (September 1991): 492-495. Accessed November 8, 2015. <http://retro.seals.ch/cntmng?pid=asm-004:1991:157::1145>.
- Lätsch, Daniel. "Innere Sicherheit und Armee." *Military Power Review der Schweizer Armee*, 2/2012 (December 2012): 18-21. Accessed November 6, 2015. http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.7179.DownloadFile.tmp/mpr212web.pdf.
- Lätsch, Daniel, and Daniel Moccand. "Moderne Verteidigung." *Military Power Review der Schweizer Armee*, 2 (Dezember 2010): 3-10. Accessed November 7, 2015. http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.28145.DownloadFile.tmp/mpr210gesamtausgabe.pdf.
- Mäder, Markus. "Euro-atlantischer Streitkräftewandel nach dem Kalten Krieg—wo steht die Schweizer Armee?" *Bulletin 2001 zur schweizerischen Sicherheitspolitik* (2001): 41-68. Accessed December 18, 2015. http://www.css.ethz.ch/publications/pdfs/Bulletin_2001-Euro-atlantischer_Streitkraeftewandel.pdf.

- Michaud, Laurent. "Quelques considérations sur la conduite opérative et l'emploi des forces spéciales." *Military Power Review der Schweizer Armee*, 1/2015 (May 2015): 34-40. Accessed November 6, 2015. http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.37117.DownloadFile.tmp/mpr115.pdf.
- Milley, Mark A. "Winning matters, especially in a complex world." *Army* (October 2015): 21-26. Accessed March 16, 2016. <http://www.ausa.org/publications/digital/Documents/greenbook2015/index.html>.
- Möckli, Daniel. "Umstrittene Schweizer Sicherheitspolitik." Dokumentation der Hearings zum Bericht 2010. *Zürcher Beiträge zur Sicherheitspolitik*, Nr. 81, (2010). Accessed April 14, 2016. <http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/ZB-81.pdf>.
- Mohler, Markus H. F. "Raumsicherung–Verfassungsrechtliche Fragen zur jüngsten Entwicklung in Rechtsetzung, Doktrin und Reglementierung über den Einsatz der Armee." *LeGes*, 3 (2008): 437-463. Accessed April 14, 2016. <https://www.bk.admin.ch/themen/lang/00938/02124/04296/index.html?lang=de>.
- Oberholzer, Juerg. "Aus der Werkstatt des Stabschefs Operative Schulung." *Allgemeine schweizerische Militärzeitschrift*, 7/8 (August 2006): 14-18. Accessed March 17, 2016. <http://retro.seals.ch/cntmng?pid=asm-004:2006:172::1398>.
- Olansky, Michael M., and Dominique Moccand. "Treten an Ort? Die schweizerische Instruktionsproblematik aus historischer Perspektive." *Military Power Review der Schweizer Armee*, 1/2015 (May 2015): 67-78. Accessed November 6, 2015. http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.37117.DownloadFile.tmp/mpr115.pdf.
- Ostertag, Hansruedi. "Armee im Wandel." *Allgemeine schweizerische Militärzeitschrift*, 2 (February 1995): 3-6. Accessed April 23, 2016. <http://www.e-periodica.ch/digbib/view?pid=asm-004:1995:161#68>.
- Reber, Alex. "Raumsicherung – moderne Landesverteidigung." *Allgemeine schweizerische Militärzeitschrift*, 4 (April 2008): 19-23. Accessed April 9, 2016. <http://www.e-periodica.ch/digbib/view?pid=asm-004:2008:174#159>.
- Riedo, Robert. "Schutz der G8-Konferenz von Evian." *Allgemeine schweizerische Militärzeitschrift*, 7-8 (August 2003): 14-15. Accessed April 24, 2016. <http://www.e-periodica.ch/digbib/view?pid=asm-004:2003:169#420>.

- Schellenberg, Aldo C. "Grundlagen für die langfristige Entwicklung der Luftwaffe." *Military Power Review der Schweizer Armee*, 2/2014 (December 2014): 5-18. Accessed November 6, 2015. http://www.vtg.admin.ch/internet/vtg/de/home/dokumentation/publik_zeitschr/military_power_revue.parsys.79525.downloadList.37117.DownloadFile.tmp/mp115.pdf.
- Senn, Hans. "Sind Struktur und Einsatzkonzeption unserer Armee überholt?" *Allgemeine schweizerische Militärzeitschrift*, 1 and 2 (January 1984): 7-9 and 67-72. Accessed February 12, 2016. <http://retro.seals.ch/digbib/view?pid=asm-04:1984:150::910>.
- van Wijk, Markus, Christoph Breitenmoser, and Thomas Schönholzer. "Die Führung der Armee XXI auf den Prüfstand, Erkenntnisse aus der Armee-Stabsrahmenübung STABILO 07." *Military Power Review der Schweizer Armee*, 3/2008 (December 2008): 12-19. Accessed November 6, 2015. <http://www.isn.ethz.ch/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=94228>.
- Vinzenz, Carlo. "Neues, operatives Denken ist gefordert: ein Einstieg in die neue Doktrin der Schweizer Armee." *Allgemeine schweizerische Militärzeitschrift*, 4 (April 1994): 7-10. Accessed November 8, 2015. <http://retro.seals.ch/cntmng?pid=asm-004:1994:160::769>.
- Vuitel, Alain. "Sûreté sectorielle—une réponse à des défis sécuritaires complexes." *Military Power Review der Schweizer Armee*, 2/2008 (December 2008): 29-31.
- Wegmueller, Hans. "Gedanken zur Doktrinschöpfung Teil 1." *Allgemeine schweizerische Militärzeitschrift*, 3 (March 1998): 4-5. Accessed January 2, 2016. <http://retro.seals.ch/digbib/view2?pid=asm-004:1998:164::137>.
- Wegmueller, Hans. "Gedanken zur Doktrinschöpfung Teil 2." *Allgemeine schweizerische Militärzeitschrift*, 4 (April 1998): 8-9. Accessed January 2, 2016. <http://retro.seals.ch/digbib/view2?pid=asm-004:1998:164::226>.
- Wenger, Andreas, Victor Mauer, and Daniel Möckli. "Sicherheit politischer Bericht 2010: viel Politik wenig Strategie." *Bulletin 2010 zur schweizerischen Sicherheitspolitik* (2001): 9-26. Accessed December 18, 2015. <http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/Bulletin-2010-9-26.pdf>.
- Wisler, Dominique. "Vers une nouvelle politique de securite." *Zürcher Beiträge zur Sicherheitspolitik und Konfliktforschung* Heft Nr 11, Forschungsstelle für Sicherheitspolitik und Konfliktanalyse ETHZ (1989), 1-31. Accessed April 5, 2016. http://www.css.ethz.ch/content/dam/ethz/special-interest/gess/cis/center-for-securities-studies/pdfs/zb_11.pdf.

Swiss Government Documents

- Federal Constitution of the Swiss Confederation*. April 18, 1999 (status as of 14 June 2015). Accessed November 11, 2015. <https://www.admin.ch/opc/en/classified-compilation/19995395/201506140000/101.pdf>.
- Federal Assembly. *Ordonnance de l'Assemblée fédérale sur l'organisation de l'armée*. March 18, 2016. Accessed, April 25, 2016. <http://www.vbs.admin.ch/internet/vbs/fr/home/themen/defence/wea/dokumente.parsys.82505.downloadList.90840.DownloadFile.tmp/textepourlevotefinal5nsf.pdf>.
- Federal Council. *Examen des objectifs de l'armée*. February 13, 2008. Accessed March 26, 2016. <https://www.admin.ch/opc/fr/federal-gazette/2008/2193.pdf>.
- . *Explications du Conseil fédéral quant à la votation du 18 mai 2003*. Accessed April 9, 2016. <https://www.bk.admin.ch/themen/pore/va/20030518/index.html?lang=fr>.
- . *Message du Conseil fédéral à l'Assemblée fédérale concernant l'organisation de l'armée*. Feuille Fédérale, July 21, 1960. Accessed February 13, 2016. <http://www.amtsdruckschriften.bar.admin.ch/viewOrigDoc.do?id=10095868>.
- . *Message concernant les modifications de l'organisation de l'armée et de la loi fédérale instituant des mesures destinées à améliorer les finances fédérales (adaptations légales concernant la réalisation de l'étape de développement 2008/11 de l'armée)*. May 31, 2006. Accessed April 23, 2016. <https://www.admin.ch/opc/fr/federal-gazette/2006/5899.pdf>.
- . *Rapport du Conseil fédéral à l'Assemblée fédérale concernant la conception de la défense nationale militaire*. Feuille Fédérale, June 6, 1966. Accessed February 13, 2016. <http://www.amtsdruckschriften.bar.admin.ch/viewOrigDoc.do?id=10098105>.
- . *Rapport du Conseil fédéral à l'Assemblée fédérale sur la politique de sécurité de la Suisse*. Feuille Fédérale, June 27, 1973, 103-147. Accessed November 11, 2015. <http://www.amtsdruckschriften.bar.admin.ch/viewOrigDoc.do?id=10101333>.
- . *Rapport du Conseil fédéral à l'Assemblée fédérale sur le plan directeur de la défense militaire des années 80*. Feuille Fédérale, September 29, 1975, 1722 – 1742. Accessed November 11, 2015. <http://www.parlament.ch/f/dokumentation/dossiers/dossiers-archiv/sipol/Documents/sipol-11-740-bericht-f.pdf>.
- . *Rapport du Conseil fédéral sur la politique de sécurité de la Suisse*. Feuille Fédérale, October 1, 1990, 794-849. Accessed January 6, 2016. <http://www.parlament.ch/f/dokumentation/dossiers/dossiers-archiv/sipol/Documents/sipol-90-061-bericht-f.pdf>.

- . *Rapport du Conseil fédéral aux chambres fédérales concernant la conception de l'armée dans les années nonante (Plan directeur de l'armée 95)*. Feuille Fédérale, January 27, 1992, 843-1015. Accessed March 16, 2016. <http://www.amtsdruckschriften.bar.admin.ch/viewOrigDoc.do?id=10106882>.
- . *Rapport du Conseil fédéral à l'Assemblée fédérale sur la politique de sécurité de la Suisse*. June 7, 1999. Accessed December 18, 2015. <http://www.vbs.admin.ch/internet/vbs/fr/home/documentation/bases/sicherheit.parsysrelated1.50662.downloadList.70459.DownloadFile.tmp/sipol2000f.pdf>.
- . *Rapport du Conseil fédéral sur la politique de sécurité de la Suisse*. June 23, 2010. Accessed November 11, 2015. <http://www.vbs.admin.ch/internet/vbs/fr/home/documentation/bases/sicherheit.parsys.5013.downloadList.36678.DownloadFile.tmp/sipolbf.pdf>.
- . *Rapport du Conseil fédéral sur la politique de sécurité de la Suisse*. October 26, 2015. Accessed November 11, 2015. <http://www.vbs.admin.ch/internet/vbs/fr/home/themen/security/sipol-berichte/sipol15/dokumente.parsys.17181.downloadList.72118.DownloadFile.tmp/20151026sipolbentwurf.pdf>.
- . *Rapport sur l'armée 2010*. October 10, 2010. Accessed April 11, 2016. <http://www.vbs.admin.ch/internet/vbs/fr/home/documentation/bases/verteidigung.parsys.9969.downloadList.80172.DownloadFile.tmp/armeeberichtf.pdf>.
- Swiss Armed Forces. *2014 Rapport annuel de l'Armée suisse*. 2015. Accessed March 25, 2016. http://www.vtg.admin.ch/internet/vtg/fr/home/dokumentation/publik_zeitrshr/jabe.parsysrelated1.38039.downloadList.36124.DownloadFile.tmp/81129dfijabe2014.pdf.
- . *Rapport annuel de l'Armée suisse 2015*. 2016. Accessed April 26, 2016. http://www.vtg.admin.ch/internet/vtg/fr/home/dokumentation/publik_zeitrshr/jabe.parsysrelated1.38039.downloadList.27704.DownloadFile.tmp/81129dfijabe2015.pdf.
- . *Operative Führung (OF 95) regulation*. January 1, 1994.
- Swiss Armed Forces Staff. *Militärdoktrin 2017 – Doktrin Grundlagen der Armee*. November 21, 2014.
- Swiss Department of Defense. “EMD-Studienkommission 96 für strategische Fragen.” June 5, 1996. Accessed April 3, 2016. <https://www.admin.ch/cp/d/1996Jul17.112106.6317@idz.bfi.admin.ch.html>.
- . *Plan directeur de l'A XXI*. May 2, 2001. Accessed March 18, 2016. <https://www.parlament.ch/centers/documents/fr/armee-21-alb-entwurf-f.pdf>.

———. Examen des objectifs de l'armée—Rapport à l'attention de l'Assemblée fédérale. December 31, 2005. Accessed March 26, 2016. <http://www.vbs.admin.ch/internet/vbs/fr/home/documentation/bases/verteidigung.parsys.0009.downloadList.00091.DownloadFile.tmp/bericht2005149bmgf.pdf>.

Swiss Department of Foreign Affairs. *White Paper on Neutrality*. November 29, 1993. Accessed November 10, 2015. https://www.eda.admin.ch/content/dam/eda/en/documents/aussenpolitik/voelkerrecht/White_Paper_on_Neutrality.en.pdf.

Swiss National Defense Commission. *Weisungen für die operative Führung 1966*. April 17, 1966.

US Government Documents

Chairman of the Joint Chiefs of Staff. CJCSI 3100.01C *Joint Strategic Planning System*. Washington, DC: Joint Chiefs of Staff, November 20, 2015. Accessed March 16, 2016. http://dtic.mil/cjcs_directives/cdata/unlimit/3100_01a.pdf.

———. CJCSI 3010.02D *Guidance for the Development and Implementation of Joint Concepts*. Washington, DC: Joint Chiefs of Staff, November 22, 2013. Accessed March 16, 2016. http://www.dtic.mil/cjcs_directives/cdata/unlimit/3010_02.pdf.

Department of Defense. Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States*. Washington, DC: Department of Defense, March 25, 2013. Accessed March 26, 2016. http://www.dtic.mil/doctrine/new_pubs/jp1.pdf.

———. Joint Publication (JP) 1-02, *Department of Defense Dictionary of Military and Associated Terms*. Washington, DC: Department of Defense, November 8, 2010. Accessed March 26, 2016. http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.

———. Joint Publication (JP) 3-0, *Joint Operations*. Washington, DC: Department of Defense, August 11, 2011. Accessed March 26, 2016. http://www.dtic.mil/doctrine/new_pubs/jp3_0.pdf.

———. Joint Publication (JP) 3-33, *Joint Task Force Headquarters*. Washington, DC: Department of Defense, July 30, 2012. Accessed March 26, 2016. http://www.dtic.mil/doctrine/new_pubs/jp3_33.pdf.

Department of the Army. Army Doctrine Publication (ADP) 3-0, *Unified Land Operations*. Washington, DC: Government Printing Office, 10 October, 2011.

———. Field Manual (FM) 3-94, *Theater Army, Corps, and Division Operations*. Washington, DC: Government Printing Office, April 21, 2014. Accessed April 23, 2016. http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/fm3_94.pdf.

———. Field Manual (FM) 100-5, *Operations*. Washington, DC: Government Printing Office, June 14, 1993. Accessed April 23, 2016. http://www.fs.fed.us/fire/doctrine/genesis_and_evolution/source_materials/FM-100-5_operations.pdf.

Other Sources

Degen, Bernard. "Groupe pour une Suisse sans Armée (GSsA)." *Dictionnaire historique de la Suisse*. Last modified July 6, 2006. Accessed March 15, 2016. <http://www.hls-dhs-dss.ch/textes/f/F15312.php>.

European Bureau for Conscientious Objection. "Conscription status map." Accessed January 1, 2016. <http://ebco-beoc.org/node/86>.

Kley, Andreas. "Système de milice." *Dictionnaire historique de la Suisse*. Last modified January 19, 2010. Accessed March 1, 2016. <http://www.hls-dhs-dss.ch/textes/f/F43694.php>.

Morandi, Pietro. "Démocratie de concordance." *Dictionnaire historique de la Suisse*. Last modified August 22, 2005. Accessed March 28, 2016. <http://www.hls-dhs-dss.ch/textes/f/F10095.php>.

Ricklin, Alois. "Neutralité." *Dictionnaire historique de la Suisse*. Last modified November 9, 2011. Accessed February 29, 2016. <http://www.hls-dhs-dss.ch/textes/f/F16572.php>.

Swiss Federal Statistical Office. "Force of parties in %." Accessed March 21, 2016. http://www.bfs.admin.ch/bfs/portal/fr/index/themen/17/02/blank/key/national_rat/parteienstaerke.html.

———. "Votations Données détaillées." Accessed March 21, 2016. <http://www.bfs.admin.ch/bfs/portal/fr/index/themen/17/03/blank/data/01.html>.

Szvirceev Tresch, Tibor, Andreas Wenger, Thomas Ferst, Sabrina Pfister and, Andrea Rinaldo. *Sicherheit 2015*. Center for Security Studies, ETH Zürich and Militärakademie an der ETH Zürich, 2015. Accessed November 10, 2015. <http://www.css.ethz.ch/publications/pdfs/Sicherheit-2015.pdf>.

United Nations. "List of peacekeeping operations 1948-2013." Accessed January 1, 2016. <http://www.un.org/en/peacekeeping/documents/operationslist.pdf>.

Urio, Paolo. "L'affaire des Mirages." *Dictionnaire historique de la Suisse*. Last modified April 29, 2008. Accessed March 29, 2016. <http://www.hls-dhs-dss.ch/textes/f/F17348.php>.